December 1974 Number 364-Part II

Solar-Geophysical Data comprehensive reports

Data for June 1974–May 1974
& Miscellanea

NOTE PRICE CHANGE

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Solar - Geophysical Data

NO. 364 DECEMBER 1974

Part II (Comprehensive Reports)

DATA FOR
JUNE 1974
MAY 1974
& MISCELLANEA

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO

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SOLAR - GEOPHYSICAL DATA

No. 364

Issued in two parts

Hope I. Leighton, Editor

J. Virginia Lincoln, Director
Solar - Terrestrial Data Services Division

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JUNE 1974 DATA

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For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

Hα SOLAR FLARES
Confirmed
JUNE 1974

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	NOAA PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
	01	0000	0002	NO FLARE PATROL															
	01	0248	0248	NO FLARE PATROL															
294 ATHN	01	0423	0430	0425	S13	E65	.910	12977	6.1	7	-N	2	C		.66				DE 4
	01	0612	0620	NO FLARE PATROL															
GRP60295	01	0657	0709	0701	S15	E61	.882	12977	5.9	12	--N				.36				2 2 2 2
ATHN	01	0657	0709	0700	S17	E60	.876	12977	5.8	12	-N	3	C		.50				DE
MONT	01	0700E	0708	0701	S13	E61	.880	12977	5.9	8D	-N		C	0701	.21				D
ATHN	01	0701E	0707	0702	S15	E61	.882	12977	5.9	6D	-N	1		0702	.34	.47			
GRP60297	01	0830	0840	0832	S14	E60	.873	12977	5.9	10	--N				.37				3 3 3 4
ATHN	01	0829	0844	0832	S15	E59	.866	12977	5.8	15	-N	3	C		.50				DE
MONT	01	0830	0840	0832	S13	E61	.880	12977	5.9	10	-N		C	0832	.21				D
MEUD	01	0830	0837	0831	S14	E61	.881	12977	5.9	7	-N		C	0831	.41	.80			
298 MONT	01	1044E	1048	1044	S13	E60	.872	12977	5.9	4D	--F		C	1044	.21				3
	01	1116	1119	NO FLARE PATROL															
GRP60299	01	1154	1208	1158	S14	E60	.873	12977	6.0	14	--N				.65				4 4 4 5
ATHN	01	1153E	1212	1155	S14	E58	.856	12977	5.8	19D	-N	1		1155	.52	.68			
HUAN	01	1154	1204	1157	S14	E60	.873	12977	6.0	10	-F	1	C	1157	.21	.44			D
KHAR	01	1155	1208D	1158	S14	E60	.873	12977	6.0	13D	1N		C	1158	1.50	3.10			EH
RAMY	01	1159E	1202D	1200U	S12	E61	.879	12977	6.1	3D	-N	2	C		.37				DE
GRP60300	01	1158	1228	1200	S12	E30	.528	12972	3.7	30	--F				.99				2 2 2 5
KHAR	01	1158	1228D		S12	E29	.514	12972	3.7	30D	-F		C	1158	1.13	1.40			EL
RAMY	01	1159E	1202D	1200U	S11	E31	.537	12972	3.8	3D	-F	2	C		.84				DE
GRP60301	01	1540	1552	1547	S12	E56	.836	12977	5.9	12	-N				.89				5 4 4 5
LOCA	01	1535E	1552	1535	S12	E54	.816	12977	5.7	17D	1N		V	1535	1.47	2.80			
HUAN	01	1540	1551	1547	S12	E56	.836	12977	5.9	11	-N	2	C	1547	.67	1.20			
MCMA	01	1548	1551	1548	S13	E56	.837	12977	5.9	11	-N		C	1548	.72	1.30			E
ATHN	01	1541	1552V	1545	S12	E53	.807	12977	5.6	11D	-N	1		1545	.85	1.07			
RAMY	01	1547E	1553	1548U	S12	E57	.845	12977	5.9	6D	-N	3	C		1.32				DE
302 HUAN	01	1736	1741	1738	S12	E55	.826	12977	5.9	5	--F	1	C	1738	.31	.56			3
303 HUAN	01	1851	1856	1852	S12	E55	.826	12977	5.9	5	--F	1	C	1852	.21	.36			D 2
GRP60304	01	2012	2018	2013	S13	E54	.818	12977	5.9	6	--N				.36				2 2 2 3
HUAN	01	2012	2015	2013	S12	E54	.816	12977	5.9	3	-N	2	C	2013	.26	.43			D
PALE	01	2013E	2020	2013U	S14	E53	.810	12977	5.8	7D	-N	2	C		.45				F
	01	2217	2255	NO FLARE PATROL															
	01	2313	2327	NO FLARE PATROL															
	01	2351	0004	NO FLARE PATROL															
	02	0021	0145	NO FLARE PATROL															
GRP60305	02	0428	0438	0428	S13	E48	.756	12977	5.8	18	1N				1.70				4 4 4 4
ATHN	02	0419	0436	0421	S14	E48	.759	12977	5.8	17	-N	3	C		.50				F H
TEHR	02	0420	0435	0427	S12	E47	.743	12977	5.7	15	-B	4	V		.66				F H
TACH	02	0422	0437D	0431	S13	E48	.756	12977	5.8	15D	2F		V	0432	3.64	5.39	3.91	72	DH
KODA	02	0432E	0443D	0432	S11	E48	.752	12977	5.8	11D	-B		P	0435	2.80	2.80			D
GRP60306	02	0526	0534	0530	S14	E48	.759	12977	5.8	8	--F				.62				2 2 2 6
ABST	02	0525	0534	0530	S14	E47	.748	12977	5.8	9	-N		C	0530	.90	1.40		61	D
ATHN	02	0527	0534	0529	S14	E48	.759	12977	5.8	7	-F	3	C		.33				DE
GRP60309	02	0955	1017	1000	S14	E51	.790	12977	6.2	22	1F				2.44				2 2 2 5
KHAR	02	0955E	1020D		S15	E52	.802	12977	6.3	25D	2N		C	0955	4.54	7.50			B
ATHN	02	0957E	1013	1000	S13	E49	.767	12977	6.1	16D	-F	1		1000	.33	.43			
GRP60311	02	1610	1625	1615	S12	E38	.635	12977	5.5	15	--F				.40				3 3 3 7
MEUD	02	1609	1620	1611	S12	E36	.609	12977	5.4	11	-F		C	1611	.52	.70			E
HUAN	02	1610	1625	1614	S14	E39	.654	12977	5.6	15	-F	2	C	1614	.21	.27			D
RAMY	02	1620E	1630	1620U	S11	E40	.657	12977	5.7	10D	-F	2	C		.46				DE
GRP60312	02	1631	1638	1632	S13	E42	.687	12977	5.8	7	--F				.27				2 2 2 7
HUAN	02	1631	1636	1631	S14	E42	.690	12977	5.8	5	-N	2	C	1631	.26	.35			D
RAMY	02	1631	1640	1632	S11	E42	.682	12977	5.8	9	-F	2	C		.28				DE
313 PALE	02	1902E	1911	1903U	S10	E45	.716	12977	6.2	9D	--F	2	V		.83				DE 2

Hα SOLAR FLARES
Confirmed
JUNE 1974

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS. COND.	OBS. TYPE	MEASUREMENTS					REMARKS
	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
	02	2033	2038	NO FLARE PATROL															
	02	2046	2124	NO FLARE PATROL															
	02	2142	2151	NO FLARE PATROL															
	02	2156	2210	NO FLARE PATROL															
314 PALE	02	2210E	2212	2210U	S16	E42	.697	12977	6.1	2D	-N	2	V		.93				F 1
	02	2212	2220	NO FLARE PATROL															
	02	2229	2247	NO FLARE PATROL															
	02	2300	2331	NO FLARE PATROL															
315 PALE	03	0153	0201	C154	S15	E41	.682	12977	6.2	8	--F	2	V		.62				DE 2
	03	0215	0237	NO FLARE PATROL															
GRP60316	03	0700	0721	0702	S12	E40	.660	12977	6.3	21	--N				.64				2 2 2 6
CATA	03	0700	0715D	0700	S12	E40	.660	12977	6.3	15D	-N	3		0700	.87	1.15		(166)	
MONT	03	0700	0721	0703	S11	E40	.658	12977	6.3	21	-N		C	0703	.41				E
GRP60322	03	1736	1745	1737	S15	E32	.571	12977	6.1	9	--F				.32				2 2 2 3
HUAN	03	1735	1743	1736	S16	E32	.576	12977	6.1	8	-F	1	C	1736	.36	.43			E
RAMY	03	1736	1747	1737	S14	E32	.566	12977	6.1	11	-F	3	C		.28				DE
GRP60323	03	1951	2010	1958	S15	E33	.584	12977	6.3	19	-N				1.40				3 3 3 3
HUAN	03	1951	2009D	1955	S15	E33	.584	12977	6.3	18D	-N	1	P	1955	1.13	1.40			E
PALE	03	1954E	2009	1958	S15	E33	.584	12977	6.3	15D	-N	2	C		1.63				F
RAMY	03	2002E	2012	2002U	S14	E32	.566	12977	6.2	10D	-F	3	C		1.44				F
GRP60324	03	1956	2014	2001	S14	W11	.299	12972	3.0	18	--F				.31				3 3 3 3
PALE	03	1936E	1955	1940	S13	W10	.275	12972	3.1	19D	-N	2	C		.36				DE
HUAN	03	1953	2009D		S14	W12	.309	12972	2.9	16D	-F	1	P	2006	.21	.21			D
PALE	03	1958	2009D	1959	S13	W11	.286	12972	3.0	11D	-F	2	C		.36				DE
RAMY	03	2002E	2014D	2002U	S14	W10	.289	12972	3.1	12D	-N	3	C		.37				DE
GRP60325	03	2101	2108	2101	S13	W12	.297	12972	3.0	7	--F				.52				2 2 2 2
HUAN	03	2100	2105	2100	S13	W10	.275	12972	3.1	5	-F	1	C	2100	.52	.54			
PALE	03	2101	2110	2102U	S12	W13	.298	12972	2.9	9	-N	2	V		.52				
GRP60326	03	2220	0000	2228	S13	W13	.309	12972	3.0	100	-B				1.03				1 1 1 1
PALE	03	2220E	2244	2228U	S13	W13	.309	12972	3.0	24D	-B	2	V		1.03				DE
PALE	03	2220E	0000	2224U	S13	W13	.309	12972	3.0	100D	-N	2	V		.83				DE
327 PALE	03	2344	2358	2350	S13	W12	.297	12972	3.1	14	--N	2	V		.62				DE 1
328 PALE	04	0008	0055	0018	S14	W13	.322	12972	3.0	47	1B	2	C		4.69				UDE 1
329 PALE	04	0056	0107	0103U	S14	E30	.540	12977	6.3	11	--F	2	C		.99				F 1
GRP60330	04	0640	0701	0646	S13	W07	.249	12972	3.8	21	-N				1.35				2 2 1 6
ABST	04	0640	0700	0643	S13	W07	.249	12972	3.8	20	-N		C	0643	1.35	1.40		61	E
HURB	04	0649E	0702D	0649	S12	W07	.235	12972	3.8	13D	-N						2.20		D
GRP60331	04	1118	1132	1118	S15	E25	.481	12977	6.3	14	-N				1.26				7 7 7 8
KHAR	04	1117E	1150D	1117	S15	E24	.468	12977	6.3	33D	1F		C	1117	2.27	2.60			B
MONT	04	1117	1128D	1118	S15	E25	.481	12977	6.3	11D	-N		C	1118	1.86				
MEUD	04	1117	1123	1118	S15	E25	.481	12977	6.3	6	-N		C	1118	1.03	1.10			E
RAMY	04	1117	1129	1119	S15	E25	.481	12977	6.3	12	-N	3	C		.83				DE
TEHR	04	1117	1125	1118	S13	E26	.480	12977	6.4	8	-N	4	C		1.00				DE
ATHN	04	1119E	1139D	1119U	S16	E25	.488	12977	6.3	20D	-F	3	V		.66				F
CATA	04	1120	1130	1120	S15	E23	.455	12977	6.2	10	-B	3		1120	1.16	1.30		(288)	
GRP60333	04	1240	1251	1245	N07	E63	.893	12981	9.3	11	--F				.62				3 3 2 6
HUAN	04	1240	1252	1246	N05	E64	.900	12981	9.3	12	-F	1	C						
TEHR	04	1240	1250	1244	N08	E64	.901	12981	9.3	10	-F	4	C		.83				DE
RAMY	04	1241	1502	1246	N07	E62	.885	12981	9.2	141	-F	3	C		.41				DE
GRP60334	04	2127	2203	2140	S15	E19	.404	12977	6.3	36	--F				.33				2 2 2 2
HUAN	04	2127	2203D	2142	S15	E19	.404	12977	6.3	36D	-F	1	C	2142	.21	.23			D
PALE	04	2134E	2137D	2137U	S15	E18	.392	12977	6.2	3D	-F	2	C		.45				
	04	2203	2224	NO FLARE PATROL															
	04	2252	2326	NO FLARE PATROL															

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	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY		MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
335 HUAN	05	1953E	2007		S08	W41	.664	12970	2.8		14D	--N	1	P	1956	.36	.48			2
	05	2034	2041	NO FLARE PATROL																
336 HUAN	05	2041E	2045D		S08	W41	.664	12970	2.8		4D	--F	1	P						1
	05	2045	2100	NO FLARE PATROL																
	05	2105	2112	NO FLARE PATROL																
	05	2132	2347	NO FLARE PATROL																
	06	0052	0102	NO FLARE PATROL																
	06	0118	0202	NO FLARE PATROL																
GRP60337	06	1420	1459	1426	S14	W15	.348	12977	5.5		39	--N				.88				4 4 4 5
RAMY	06	1420	1501	1423	S15	W16	.370	12977	5.4		41	-N	4	C		1.11				F
TEHR	06	1420	1503	1422	S13	W13	.313	12977	5.6		43	-N	4	C		.96				F
HUAN	06	1421	1501	1424	S14	W15	.348	12977	5.5		40	-N	1	C	1424	.41	.44			
ATHN	06	1422E	1452	1425	S12	W17	.353	12977	5.3		30D	-N	3	V		.99				DE
TEHR	06	1422E	1450	1432U	S13	W13	.313	12977	5.6		28D	-N	3	V		.99				F Z
GRP60338	06	1535	1601	1543	S14	W46	.738	12972	3.2		26	1B				3.19				4 4 4 4
RAMY	06	1532	1602	1540	S16	W47	.755	12972	3.1		30	1B	4	C		1.86				DE F
CATA	06	1535	1600D	1540	S16	W48	.765	12972	3.0		25D	3B	3		1540	8.69	13.51		(331)	H
HUAN	06	1538	1559	1546	S14	W46	.738	12972	3.2		21	-B	1	C	1546	.88	1.31			H
ATHN	06	1540E	1604	1544	S10	W44	.706	12972	3.4		24D	-B	3	V		1.32				F
RAMY	06	1540E	1555	1545U	S15	W47	.752	12972	3.1		15D	-B	4	V		1.32				DE F
	06	1907	1909	NO FLARE PATROL																
	06	1910	1917	NO FLARE PATROL																
	06	1949	1957	NO FLARE PATROL																
	06	2018	2038	NO FLARE PATROL																
	06	2053	2225	NO FLARE PATROL																
	06	2235	2249	NO FLARE PATROL																
	07	0228	0230	NO FLARE PATROL																
GRP60340	07	0550	0605	0557	N04	E23	.396	12981	9.0		15	--F				.61				3 2 2 7
ATHN	07	0550	0601	0552	N03	E22	.378	12981	8.9		11	-F	3	V		.99				DE
TEHR	07	0601E	0608D	0601U	N04	E23	.396	12981	9.0		7D	-N	2	C		.23				DE
ABST	07	0608E	0614D	0608	N04	E24	.412	12981	9.1		6D	-N		P	0608	1.79	2.80			E
9 STATIONS REPORTING GROUP 60341. 0 STATIONS OBSERVING AND NOT REPORTING.																				
GRP60341	07	0912	1010	0934	S14	W26	.490	12977	5.4		58	1N				3.27				6 6 6 8
MONT	07	0909	1021	0932	S15	W26	.497	12977	5.4		72	1N		C	0932	2.58				
KHAR	07	0912E	1000D	0929	S14	W26	.490	12977	5.4		48D	2N		C	0929	9.08	10.40			CE
ARCE	07	0913	0943	0936	S15	W27	.509	12977	5.4		30	-B		C	0936	1.71	1.90			
ATHN	07	0914	1013	0929	S14	W27	.503	12977	5.4		59	-N	4	C		1.82				F
CATA	07	0935	1035	0940	S14	W27	.503	12977	5.4		60	1B	3		0940	2.31	2.68		(245)	
LOCA	07	0938E	1010	0938	S13	W25	.469	12977	5.5		32D	1N		V	0938	2.10	2.30			
60341	07	0916	0949	0922	S15	W25	.484	12977	5.5		33	*-N				1.29				4 4 4 8
MONT	07	0910	0937	0923	S13	W21	.416	12977	5.8		27	-F		C	0923	.21				
MEUD	07	0912E	1008D		S14	W26	.490	12977	5.4		56D	-N		C	0915	1.13	1.30			CE
TEHR	07	0918E	1000D	0921	S16	W27	.516	12977	5.4		42D	1B	2	C		2.19				F
BUCA	07	0922	0932		S15	W26	.497	12977	5.4		10	-N		P	0923	1.64	1.90			E
	07	1801	1841	NO FLARE PATROL																
	07	1843	1906	NO FLARE PATROL																
	07	1922	1937	NO FLARE PATROL																
	07	1941	1950	NO FLARE PATROL																
	07	2010	2017	NO FLARE PATROL																
	07	2036	2043	NO FLARE PATROL																
	07	2056	2122	NO FLARE PATROL																
	07	2132	2208	NO FLARE PATROL																

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	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
	07	2213	2221	NO FLARE PATROL															
GRP60343	07	2236	2244	2238	S15	W44	.719	12977	4.6	8	-F				.78				2 2 2 2
PALE	07	2236E	2235D	2236U	S14	W43	.705	12977	4.7		-F	2	C		.63				F
MITK	07	2239E	2244	2240	S15	W45	.731	12977	4.6	5D	-N		C	2240	.93	1.30			E
	07	2238	2239	NO FLARE PATROL															
	07	2254	2255	NO FLARE PATROL															
	08	0214	0216	NO FLARE PATROL															
	08	1850	1858	NO FLARE PATROL															
	08	2023	2045	NO FLARE PATROL															
	08	2137	2214	NO FLARE PATROL															
	08	2236	2245	NO FLARE PATROL															
	08	2302	2308	NO FLARE PATROL															
GRP60345	09	1221	1230	1223	N05	E61	.875	12993	14.1	9	--F				.27				2 2 2 6
RAMY	09	1220	1226D	1223	N06	E60	.867	12993	14.0	6D	-F	3	C		.37				DE
ATHN	09	1221	1230	1223	N03	E62	.883	12993	14.2	9	-F	3	C		.17				F
GRP60351	09	1833	1852	1838	N12	W46	.733	12994	6.3	19	--F				.39				2 2 2 3
HUAN	09	1833	1852	1838	N14	W48	.760	12994	6.2	19	-F	1	C	1838	.26	.40			D
PALE	09	1836E	1847D	1837U	N10	W43	.693	12994	6.5	11D	-N	1	V		.52				DE
352 PALE	09	2010E	2017	2011U	S06	W50	.769	12995	6.1	7D	--F	2	V		.31				DE 2
GRP60353	09	2015	2035	2022	S07	W51	.781	12977	6.0	20	--F				.29				2 2 2 2
HUAN	09	2010	2034		S07	W52	.792	12977	5.9	24	-F	1	C	2018	.26	.42			D
PALE	09	2019	2035	2022	S06	W50	.769	12977	6.1	16	-N	2	C		.31				DE
354 PALE	09	2105E	2118	2107	N15	W50	.783	12994	6.1	13D	--N	2	V		.62				U 1
	09	2142	2150	NO FLARE PATROL															
	09	2343	2345	NO FLARE PATROL															
	10	0004	0114	NO FLARE PATROL															
	10	0115	0126	NO FLARE PATROL															
355 PALE	10	0115E	0132	0117	N06	E56	.831	12993	14.3	17D	-N	2	C		.83				F 1
356 PALE	10	0212	0223	0212	N03	E52	.788	12993	14.0	11	--N	2	C		.26				DE 2
357 PALE	10	0245	0251	0247	N06	W31	.522	12981	7.8	6	--F	2	V		.26				DE 2
358 PALE	10	0304	0312D	0307	N04	E39	.631	12993	13.1	8D	--F	2	C		.41				DE 3
GRP60359	10	0635	0710	0641	N05	E53	.800	12993	14.2	35	-N				1.45				2 2 2 6
ABST	10	0634E	0642D	0641	N05	E54	.810	12993	14.3	8D	1N		P	0641	1.79	2.90			F
BUCA	10	0635	0710		N05	E52	.789	12993	14.2	35	-N		C	0637	1.10	1.70			E
GRP60360	10	0920	0927	0924	N03	E45	.708	12993	13.8	7	--F				.67				2 2 2 5
KHAR	10	0920E	0928D	0924	N03	E44	.695	12993	13.7	8D	1F		P	0924	1.13	1.50			
MONT	10	0920	0926	0923	N03	E45	.708	12993	13.8	6	-N		C	0923	.21				D
GRP60361	10	1324	1332	1326	N03	E41	.657	12993	13.6	8	--B				.29				2 2 2 4
RAMY	10	1324	1334	1327	N04	E40	.644	12993	13.6	10	-N	3	C		.28				DE
CATA	10	1325E	1330	1325	N02	E42	.669	12993	13.7	5D	-B	3		1325	.29	.39		(257)	
362 RAMY	10	1409	1420	1414U	N04	E40	.644	12993	13.6	11	--N	3	C		.37				DE 3
GRP60363	10	1729	1738	1730	N05	E43	.684	12993	14.0	9	--F				.55				2 2 2 3
RAMY	10	1723	1739	1730U	N05	E43	.684	12993	13.9	16	-F	3	C		.37				DE
MCMA	10	1735	1736		N04	E43	.683	12993	14.0	1	-F		C	1736	.72	1.00			EH
	10	1822	1913	NO FLARE PATROL															
	10	1953	2009	NO FLARE PATROL															
	10	2019	2057	NO FLARE PATROL															
	10	2219	2234	NO FLARE PATROL															

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	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY		MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
	10	2235	2241	NO FLARE PATROL																
	10	2304	2311	NO FLARE PATROL																
GRP60364	11	0722	0736	0727	S09	W73	.958	12977	5.8		14	--N				.46				2 2 2 4
MONT	11	0713	0721	0719	S08	W72	.952	12977	5.9		8	-N		C	0719	.21				D
ARCE	11	0720E	0740D		S10	W73	.958	12977	5.8		20D	-N		C	0727	.50				
MONT	11	0723	0732	0727	S08	W72	.952	12977	5.9		9	-N		C	0727	.41				E
GRP60366	11	0800	0810	0802	N04	W32	.532	12981	8.9		10	--F				.79				2 2 2 4
TEHR	11	0759	0813	0801	N03	W32	.531	12981	8.9		14	-F	3	C		.45				DE S
MONT	11	0801	0806	0803	N05	W32	.534	12981	8.9		5	-N		C	0803	1.13				E
GRP60368	11	0920	0944	0926	S09	W75	.967	12977	5.8		24	--F				.77				2 2 2 6
MONT	11	0920	0944	0925	S09	W75	.967	12977	5.8		24	-N		C	0925	.41				EK
KHAR	11	0925E	0932D	0927	S07	W74	.962	12977	5.8		7D	1F		P	0927	1.13				
KHAR	11	0925E	0932D	0927	S09	W77	.975	12977	5.6		7D	1F		P	0927	.52				
GRP60372	11	1115	1133	1119	N04	E35	.576	12993	14.1		18	-N				1.76				5 5 5 6
KHAR	11	1110E	1137D	1120	N05	E35	.577	12993	14.1		27D	1N		C	1120	3.97	5.00			
CATA	11	1115	1130	1120	N02	E35	.574	12993	14.1		15	-B	3		1120	1.16	1.41		(234)	
TEHR	11	1115	1132D	1117	N03	E36	.589	12993	14.2		17D	-N	4	C		.64				F
ATHN	11	1117	1126D	1120	N03	E36	.589	12993	14.2		9D	-N	2	C		.99				DE
MONT	11	1117E	1131	1118	N05	E32	.534	12993	13.9		14D	-N		C	1118	2.86				
GRP60373	11	1531	1538	1533	N03	E34	.568	12993	14.2		7	--N				.57				3 3 2 6
MEUD	11	1531	1537	1532	N04	E34	.561	12993	14.2		6	-N		C						
MCMA	11	1531	1538	1532	N03	E34	.560	12993	14.2		7	-N		C	1532	.31	.48			
ATHN	11	1532	1540	1536	N03	E35	.575	12993	14.3		8	-F	3	C		.83				F
	11	1838	1841	NO FLARE PATROL																
	11	1903	1929	NO FLARE PATROL																
375 PALE	11	1938E	1935	1938U	N06	E23	.400	12993	13.5		5D	--F	2	C		.27				H 1
376 PALE	11	1937	1958D	1946	N04	E32	.532	12993	14.2		21D	--F	2	C		.63				F 1
	11	2005	2020	NO FLARE PATROL																
	11	2049	2106	NO FLARE PATROL																
	11	2131	2312	NO FLARE PATROL																
	11	2321	2348	NO FLARE PATROL																
	12	0012	0026	NO FLARE PATROL																
	12	0055	0108	NO FLARE PATROL																
GRP60386	12	1609	1615	1614	N08	W54	.812	12981	8.6		6	--F				.58				2 2 2 4
MCMA	12	1609	1618		N06	W56	.830	12981	8.5		1	-F		P	1610	.31	.60			
ATHN	12	1611E	1620	1614	N10	W52	.794	12981	8.8		9D	-F	1		1614	.85	1.07			
GRP60388	12	1704	1715	1706	N06	W51	.779	12981	8.9		11	--F				.48				3 3 3 3
RAMY	12	1704	1716	1705	N03	W50	.766	12981	9.0		12	-F	4	C		.28				DE
MCMA	12	1704	1712	1706	N06	W56	.830	12981	8.5		8	-F		C	1706	.31	.60			E
ATHN	12	1704	1717	1708	N08	W48	.748	12981	9.1		13	-F	1		1708	.85	1.01			
	12	2237	2243	NO FLARE PATROL																
	12	2246	2255	NO FLARE PATROL																
	13	2017	2026	NO FLARE PATROL																
	13	2037	2044	NO FLARE PATROL																
	13	2048	2123	NO FLARE PATROL																
	13	2131	2158	NO FLARE PATROL																
	14	0126	0142	NO FLARE PATROL																

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	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	NOAA PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
GRP60391	14	1006	1037	1016	N07	W05	.137	12993	14.0	31	--N				.55				5 5 5 5
TEHR	14	1001	1053	1013	N06	W04	.113	12993	14.1	52	-F	3	C		.55				S
ATHN	14	1004	1033	1009	N08	W04	.142	12993	14.1	29	-F	3	C		.50				DE
ARCE	14	1005	1034	1022	N06	W08	.165	12993	13.8	29	-N		C	1022	.72	.70			
MONT	14	1006	1031	1014	N08	W04	.142	12993	14.1	25	-N		C	1014	.21				D
MONT	14	1008	1021	1013	N07	W09	.188	12993	13.7	13	-F		C	1013	.21				
CATA	14	1015	1035	1020	N07	W04	.127	12993	14.1	20	-N	3		1020	.58	.58		(191)	
GRP60394	14	1419	1500	1423	N06	W09	.179	12993	13.9	41	1B				2.80				7 7 7 7
ATHN	14	1416	1456	1422	N06	W08	.165	12993	14.0	40	-N	2	C		2.80				U
HUAN	14	1418	1500	1420	N06	W10	.194	12993	13.8	42	-N	2	C	1420	1.50	1.52			E
MCMA	14	1419	1455	1422	N07	W09	.188	12993	13.9	36	1B		C	1422	1.96	2.00			F
RAMY	14	1419E	1454	1423	N06	W09	.179	12993	13.9	35D	1B	4	W		4.95				F
MONT	14	1419	1505	1422	N06	W10	.194	12993	13.8	46	1B		C	1422	2.58				
CATA	14	1420	1510	1420	N06	W09	.179	12993	13.9	50	1B	3		1420	3.48	3.53		(324)	
HERS	14	1432E	1448D	1432U	N06	W10	.194	12993	13.9	16D	1N		P	1441	3.11	3.10			E
GRP60395	14	1540	1548	1542	N05	W81	.988	12981	8.6	8	--F				.46				3 3 3 6
ATHN	14	1538	1550	1542	N03	W80	.985	12981	8.7	12	-F	2	C		.87				DE
HUAN	14	1540	1547	1542	N05	W82	.990	12981	8.5	7	-F	1	C	1542	.21				D
MEUD	14	1541	1548	1543	N07	W80	.985	12981	8.7	7	-F		C	1543	.31				D
GRP60396	14	1618	1629	1619	N06	W09	.179	12993	14.0	11	--N				.70				3 3 3 4
MEUD	14	1617	1625	1618	N05	W09	.172	12993	14.0	8	-F		C	1618	.62	.60			E
ATHN	14	1617	1631	1620	N06	W10	.194	12993	13.9	14	-N	1		1620	.85	.80			
MCMA	14	1619	1632		N07	W07	.161	12993	14.2	13	-N		C	1620	.62	.60			E
	14	1850	1856	NO FLARE PATROL															
	14	1904	1924	NO FLARE PATROL															
	14	1948	1950	NO FLARE PATROL															
	14	2010	2024	NO FLARE PATROL															
	14	2030	2037	NO FLARE PATROL															
	14	2119	2127	NO FLARE PATROL															
	14	2142	2200	NO FLARE PATROL															
	14	2202	2208	NO FLARE PATROL															
	15	0111	0115	NO FLARE PATROL															
	15	1820	1838	NO FLARE PATROL															
	15	1904	1913	NO FLARE PATROL															
	15	1931	1940	NO FLARE PATROL															
	15	1952	1955	NO FLARE PATROL															
	15	2043	2053	NO FLARE PATROL															
	15	2106	2109	NO FLARE PATROL															
	15	2114	2117	NO FLARE PATROL															
	15	2131	2237	NO FLARE PATROL															
GRP60397	16	0409	0417	0411	S16	E38	.659	13002	19.0	8	--F				.18				2 2 2 5
ATHN	16	0409	0417	0411	S14	E38	.650	13002	19.0	8	-N	2	C		.17				DE
TEHR	16	0409	0417	0411	S17	E37	.652	13002	18.9	8	-F	3	C		.19				F
	16	0843	0845	NO FLARE PATROL															
	16	1803	1810	NO FLARE PATROL															
	16	1822	1858	NO FLARE PATROL															
	16	1907	1913	NO FLARE PATROL															
	16	1939	1946	NO FLARE PATROL															
	16	1948	2006	NO FLARE PATROL															
	16	2017	2019	NO FLARE PATROL															

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OBSERV-ATORY	OBSERVED UT				LOCATION						DURA-TION	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY		MIN.		COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
	16	2200	2215	NO FLARE PATROL																
	17	1849	1858	NO FLARE PATROL																
	17	1900	1904	NO FLARE PATROL																
	17	1919	1946	NO FLARE PATROL																
	17	2033	2056	NO FLARE PATROL																
	17	2243	2252	NO FLARE PATROL																
401 MANI	18	0124E	0150	0126	S16	E15	.388	13002	19.2		26D	--N	2		0126	.41	.45			2
GRP60403	18	0704	0714	0707	S17	E10	.356	13002	19.0		10	-N				1.03				4 4 4 6
ABST	18	0656	0710	0657	S14	E08	.297	13002	18.9		14	-F		C	0657	.90	.90			DV
MANI	18	0702	0715	0706	S16	E12	.359	13002	19.2		13	-N	2		0706	1.03	1.10			H
ABST	18	0703	0715	0707	S16	E11	.350	13002	19.1		12	-B		C	0707	1.79	1.90		73	EL
ATHN	18	0704E	0716	0707	S18	E10	.370	13002	19.0		12D	-N	3	V		.66				DE
UPIC	18	0705	0710	0706	S17	E10	.356	13002	19.0		5	-F		P	0706	.63				
GRP60407	18	1024	1050	(1039)	S17	E08	.342	13002	19.0		26	--F				.29				3 3 3 6
MONT	18	1024	1048	1034	S17	E09	.348	13002	19.1		24	-N		C	1034	.21				D
ATHN	18	1037E	1047D	1039U	S18	E08	.357	13002	19.0		10D	-F	3	V		.33				DE
KHAR	18	1045	1052		S17	E08	.342	13002	19.0		7	-F			1045	.34	.40			
	18	1929	1944	NO FLARE PATROL																
	18	1952	1958	NO FLARE PATROL																
	18	2239	2253	NO FLARE PATROL																
412 PALE	19	2200	2253D	2213	S12	W08	.270	13002	19.3		53D	--N	3	C		.91				F U 2
412 PALE	19	2200	2253D	2235	S12	W08	.270	13002	19.3		53D	--N	3	C		.81				F U 2
414 PALE	19	2235	2244	2240	S16	W01	.301	13002	19.9		9	--N	3	V		.31				DE 2
	20	2127	2200	NO FLARE PATROL																
GRP60417	21	1429	1514	1441	S17	W28	.550	13002	19.5		45	1N				1.70				4 4 3 5
RAMY	21	1426	1520	1441	S17	W27	.538	13002	19.6		54	-N	4	C		1.49				DE
ATHN	21	1428	1512	1442	S18	W32	.604	13002	19.2		44	-N	2	C		1.49				DE
MEUD	21	1430	1450D		S17	W28	.550	13002	19.5		20D	1N		C	1440	2.06	2.40			LU
RAMY	21	1435E	1515D	1440	S16	W28	.542	13002	19.5		40D	-N	4	V		1.55				DE
LOCA	21	1445E	1457D		S15	W25	.498	13002	19.7		12D	2N		S						HL
4 STATIONS REPORTING GROUP 60418. 0 STATIONS OBSERVING AND NOT REPORTING.																				
GRP60418	21	1805	1850	1822	S21	W24	.540	13002	20.0		45	--F				1.34				2 2 2 4
RAMY	21	1759	1850D	1822	S20	W25	.541	13002	19.9		51D	1F	3	C		2.06				F S
RAMY	21	1759	1850D	1816	S20	W25	.541	13002	19.9		51D	-F	3	C		1.55				F S
HUAN	21	1811	1846D		S22	W23	.540	13002	20.0		35D	-N	1	P	1838	.62	.75			E
60418	21	1805	2033	1904	S21	W27	.571	13002	19.7		14B	*-F				1.76				2 2 2 2
MCMA	21	1805	2034		S20	W27	.563	13002	19.7		14I	1N		C	1856	1.65	2.10			F1
PALE	21	1806E	2031	1904U	S21	W26	.561	13002	19.8		145D	-F	2	V		1.86				F
PALE	21	1806E	2031	1807U	S21	W26	.561	13002	19.8		145D	-F	2	V		1.44				F
	21	1856	1904	NO FLARE PATROL																
GRP60419	22	0009	0035	0019	S14	W36	.630	13002	19.3		26	--F				.72				2 2 2 3
MANI	22	0009	0036	0019	S16	W36	.640	13002	19.3		27	-F	2		0019	.52	.67			U
PALE	22	0013E	0033	0018U	S12	W35	.608	13002	19.4		20D	-F	2	C		.91				F
420 PALE	22	0121	0212	0129	S15	W50	.791	13002	18.3		51	--N	3	C		.45				DE 3
GRP60422	22	0306	0352	0321	S14	W38	.654	13002	19.3		46	-F				.59				2 2 2 5
MANI	22	0306	0352	0321U	S16	W38	.663	13002	19.3		46	-F	2		0321	.62	.82			U
PALE	22	0310E	0320D	0320U	S12	W38	.645	13002	19.3		10D	-F	2	C		.55				U
60422	22	0306	0352	0344	S14	W38	.654	13002	19.3		46	*1N				1.74				3 3 3 5
MANI	22	0306	0352	0343U	S16	W38	.663	13002	19.3		46	1N			0343	1.86	2.47			U2
ATHN	22	0339	0352	0343	S13	W39	.662	13002	19.2		13	-N	2	C		1.65				F
TEHR	22	0339	0352D	0346	S13	W36	.625	13002	19.5		13D	1N	2	C		1.71				U F
	22	1808	1818	NO FLARE PATROL																
	22	1822	1828	NO FLARE PATROL																

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	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
	22	1832	1848	NO FLARE PATROL															
GRP60423	23	0121	0207	0122	S16	W50	.794	13002	19.3	46	--F				.26				2 1 1 4
PALE	23	0121	0207	0122	S16	W50	.794	13002	19.3	46	-F	3	V		.26				DE
MANI	23	0126	0205	0140	S20	W49	.797	13002	19.4	39	-N	2		0140	.83	1.29			
GRP60424	23	0511	0541	0518	S14	W50	.788	13002	19.5	30	1N				4.85				4 4 4 6
MANI	23	0452	0549D	0518	S16	W51	.804	13002	19.4	57D	1B	2		0549	3.09	4.98			FU
ATHN	23	0508E	0527	0516U	S13	W50	.786	13002	19.5	19D	-N	3	V		1.16				F
CULG	23	0509	0528D	0518	S16	W48	.774	13002	19.6	19D	1N		P	0518	1.65	1.60			
TACH	23	0516	0558D	0519	S12	W51	.794	13002	19.4	42D	3F		V	0550	10.30	17.20	2.99	74	EHSU
7 STATIONS REPORTING GROUP 60424. 1 STATIONS OBSERVING AND NOT REPORTING.																			
60424	23	0513	0715	0543	S15	W50	.791	13002	19.5	122	*2B				14.24				6 6 6 7
MANI	23	0452	0549D	0547	S16	W51	.804	13002	19.4	57D	3B			0547	8.25	13.20			2
ATHN	23	0508	0555D	0546U	S13	W50	.786	13002	19.5	47D	1N	1	V		3.63				F
TEHR	23	0515	0636	0539U	S16	W45	.742	13002	19.8	81	1B	3	V		3.09				U F
BUCA	23	0516	0715	0544	S18	W51	.809	13002	19.4	119	3N		C	0544	11.08	18.50			Y
WEND	23	0528E	0709D	0550	S13	W52	.806	13002	19.3	101D	3B		P		49.50				
ABST	23	0532E	0615	0534	S15	W50	.791	13002	19.5	43D	3B		P	0534	9.90	16.00		95	EL
60424	23	0605	0658	0638	S14	W52	.808	13002	19.4	53	*-N				1.35				2 1 1 9
CATA	23	0605E	0700	0610	S13	W51	.796	13002	19.4	55D	2B	3		0610	6.37	10.53		(288)	U
ABST	23	0637	0655	0638	S14	W52	.808	13002	19.4	18	-N		C	0638	1.35	2.00			EH
	23	1635	1637	NO FLARE PATROL															
	23	2157	2203	NO FLARE PATROL															
	23	2209	2215	NO FLARE PATROL															
	23	2400	0007	NO FLARE PATROL															
	24	0145	0152	NO FLARE PATROL															
GRP60427	24	1508	1531	1514	S13	W69	.940	13002	19.5	23	1N				2.05				6 6 4 7
CATA	24	1505	1525	1515	S10	W70	.944	13002	19.4	20	2B	3		1515	4.05			(204)	
HUAN	24	1507	1521	1510	S13	W69	.940	13002	19.5	14	-F	1	C						
RAMY	24	1507	1547	1513	S14	W70	.946	13002	19.4	40	1N	3	C		2.51				U
ATHN	24	1509E	1551	1515	S15	W72	.957	13002	19.2	42D	1N	3	V		1.32				F H
MCMA	24	1511	1521		S13	W68	.934	13002	19.5	10	-N		P	1515	.31	.90			D
TEHR	24	1515E	1522	1515U	S15	W67	.930	13002	19.6	7D	2N	1	V						F
GRP60428	25	0616	0634	0620	S11	W73	.960	13002	19.8	18	--F				.52				3 3 3 7
ATHN	25	0613	0628	0616	S12	W68	.934	13002	20.2	15	-F	3	C		.66				F
MANI	25	0615	0638	0619	S13	W76	.974	13002	19.6	23	-F	2		0619	.62	1.50			F
CATA	25	0620	0635	0625	S09	W76	.973	13002	19.6	15	-N	3		0625	.29			(155)	
GRP60435	27	0803	0852	0815	S13	E75	.970	13037	3.0	49	-N				1.27				3 3 3 4
ATHN	27	0802	0848D	0819	S12	E74	.965	13037	1.9	46D	-N	3	C		.50				F
TEHR	27	0803	0852	0815	S14	E76	.974	13037	2.0	49	-N	3	C		.73				F
KIEV	27	0811E	0841D	0812	S12	E75	.970	13037	2.0	30D	1N		C	0812	2.58			60	DHI
	27	1947	1958	NO FLARE PATROL															
	27	2018	2026	NO FLARE PATROL															
436 PALE	27	2040	2042D	2042U	S10	E62	.891	13037	1.5	2D	--F	3	C		.55				F 2
	27	2110	2139	NO FLARE PATROL															
	27	2142	2219	NO FLARE PATROL															
	28	0030	0035	NO FLARE PATROL															
GRP60439	28	0838	0854	0844	S15	E81	.990	13043	4.4	16	--F				.84				3 3 3 4
TEHR	28	0837	0853	0843	S18	E86	.999	13043	3.8	16	-F	2	C		.73				
ABST	28	0838	0857	0845	S14	E80	.987	13043	3.4	19	1N		C	0845	1.18				E
MANI	28	0839	0853	0845	S14	E78	.982	13043	3.2	14	-F	2		0845	.62	1.56			
442 RAMY	28	1450E	1512D	1458U	S13	E71	.952	13043	2.9	22D	--F	3	C		.21				DE 3
	28	1919	1924	NO FLARE PATROL															
443 MCHA	28	2050	2103	2054	S16	E65	.919	13043	2.7	13	--N		C	2054	.52	1.40			EH 1
	28	2127	2203	NO FLARE PATROL															
	28	2219	2250	NO FLARE PATROL															

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OBSERVATORY	OBSERVED UT				LOCATION						DURATION	IMPORTANCE	OBS. COND.	OBS. TYPE	MEASUREMENTS					REMARKS
	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	HOMATH PLAGE REGION	CMP DAY		MIN.				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
444 MANI	28	2352	0024	0003	S13	E63	.902	13043	2.7		32	--F	2		0003	.72	1.42			F 2
445 MANI	29	0105E	0145	0105U	S11	E65	.914	13043	2.9		40D	--F	2		0105	.72	1.45			F 2
445 MANI	29	0105E	0145	0130	S11	E65	.914	13043	2.9		40D	--F			0130	.83	1.66			2 2
447 ABST	29	0308	0318	0310	S13	E60	.879	13043	2.6		10	-N		C	0310	.90	1.80			DJZ 4
GRP60448	29	0337	0409	0350	S17	E69	.944	13043	4.3		32	1N				1.03				3 3 3 5
ABST	29	0336	0408	0352	S17	E69	.944	13043	3.3		32	1B		C	0352	1.08			76	FJZ
TEHR	29	0337	0410D	0348	S17	E72	.959	13043	3.6		33D	-F	4	C		.64				DE
TACH	29	0347E	0400D	0350	S16	E67	.932	13043	3.2		13D	1B		V	0347	1.37	3.72	2.03	108	DJLT
449 ABST	29	0415	0424	0417	S15	E63	.905	13043	2.9		9	--F		C	0417	.63	1.30			DJZ 4
450 ABST	29	0502	0512	0507	S15	E64	.912	13043	3.0		10	--F		C	0507	.90	2.00			DJZ 5
GRP60456	29	1037	1144	1044	S17	E59	.878	13043	3.9		67	1N				2.09				2 2 2 3
ABST	29	1034E	1144	1042	S15	E62	.897	13043	3.1		70D	2N		P	1042	3.60	6.80			FHJK
CATA	29	1040	1100D	1045	S18	E56	.856	13043	2.6		20D	-N	3		1045	.58	1.12		(162)	
60456	29	1122	1154	1126	S14	E57	.856	13043	3.7		32	*-B				1.16				2 2 2 5
TEHR	29	1115	1148	1118	S12	E58	.861	13043	2.9		33	-N	4	C		.64				F H
UPIC	29	1128	1200U	1133U	S15	E55	.841	13043	2.6		32D	1B		P	1133	1.68				
GRP60458	29	1302	1316	1304	S16	E12	.376	13030	30.4		14	--F				.34				2 1 1 5
ATHN	29	1302E	1316	1304	S16	E12	.376	13030	30.4		14D	-F	1		1304	.34	.33			
MCMA	29	1315	1331	1324	S09	E13	.299	13030	30.5		16	-N		C	1324	.41	.40			EH
GRP60460	29	1406	1412	1409	S13	E36	.629	13037	2.3		6	--F				.22				2 2 2 5
MCMA	29	1406	1418	1407	S09	E35	.599	13037	1.2		4	-F		C	1407	.26	.30			D
ATHN	29	1408E	1413	1410	S16	E36	.645	13037	1.3		5D	-F	1		1410	.17	.18			
GRP60461	29	1411	1429	1419	S14	E57	.856	13043	3.9		18	--F				.30				2 2 2 5
MCMA	29	1411	1430	1422	S14	E54	.829	13043	2.6		19	-N		C	1422	.26	.40			D
ATHN	29	1413E	1427	1415	S14	E59	.873	13043	3.0		14D	-F	1		1415	.34	.47			
GRP60463	29	1457	1528	1502	S13	E56	.845	13043	3.8		31	--B				.56				5 5 5 7
RAMY	29	1457	1537	1500	S12	E56	.844	13043	2.8		40	-B	4	C		.65				DE H
MCMA	29	1457	1538	1500	S14	E52	.811	13043	2.5		41	-B		C	1500	.52	1.00			E1
TEHR	29	1458	1517	1500	S12	E57	.853	13043	2.9		19	-N	4	C		.66				F H
HUAN	29	1459E	1510D		S13	E55	.836	13043	2.7		11D	-N	1	P	1501	.46	.86			
ATHN	29	1506E	1519	1506U	S13	E59	.871	13043	3.1		13D	-B	4	V		.50				F
GRP60464	29	1526	1544	1531	S13	E57	.854	13043	3.9		18	--N				.38				2 2 2 5
HUAN	29	1526	1540	1531	S13	E55	.836	13043	2.8		14	-N	1	C	1531	.41	.74			
ATHN	29	1529E	1548	1530	S13	E59	.871	13043	3.1		19D	-N	1		1530	.34	.47			
GRP60465	29	1746	1800	1751	S13	E53	.818	13043	3.7		14	--N				.40				3 3 3 3
RAMY	29	1745	1801	1753	S12	E52	.806	13043	2.6		16	-N	3	C		.37				DE
HUAN	29	1746	1758	1750	S13	E54	.827	13043	2.8		12	-N	1	C	1750	.46	.81			
PALE	29	1747	1752D	1751	S14	E52	.811	13043	2.6		5D	-N	3	C		.36				
	29	1936	1947	NO FLARE PATROL																
467 RAMY	29	1952	2018	1958U	S09	E09	.253	13030	30.5		26	--N	3	C		.65				DE 1
468 HUAN	29	2103E	2106		S13	E50	.788	13043	2.6		3D	--F	1	P	2103	.36	.59			2
	29	2239	2300	NO FLARE PATROL																
	29	2324	2328	NO FLARE PATROL																
469 VORO	30	0119	0125	0121	S10	E08	.259	13030	30.7		6	--N		C	0121	.65	.66		58	DJL 2
470 VORO	30	0207	0214	0209	S10	E08	.259	13030	30.7		7	--N		C	0209	.93	.95		59	DJH 3
471 VORO	30	0213	0225	0214	N10	E72	.950	13047	4.5		12	1N		C	0214	.84	3.16		64	EGJK 3
GRP60472	30	0226	0245	0232	S11	E49	.773	13043	3.8		19	--N				.61				3 3 3 4
TEHR	30	0224E	0238D	0232	S11	E48	.763	13043	2.7		14D	-N	3	C		.28				DE
VORO	30	0228	0241	0231	S10	E50	.781	13043	2.9		13	-N		C	0231	1.02	1.59		59	EJ
MANI	30	0233E	0249	0233U	S13	E48	.768	13043	2.7		16D	-N	2		0233	.52	.79			FE

Hα SOLAR FLARES
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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH HG	MAX. INT. %	
GRP60474	30	0352	0402	0356	S15	E44	.732	13043	3.5	10	--F				.57				3 3 3 5
VORO	30	0351	0359	0354	S15	E44	.732	13043	2.5	8	-N		C	0354	.74	1.08		55	D
MANI	30	0352	0359	0354	S16	E43	.725	13043	2.4	7	-F	2		0354	.21	.29			
TEHR	30	0354E	0402	0356	S18	E42	.723	13043	2.3	8D	-F	3	V		.66				
VORO	30	0354	0406	0357	S12	E48	.765	13043	2.8	12	-N		C	0357	.46	.69		57	DJ
MANI	30	0356	0405	0359	S14	E46	.758	13043	2.6	9	-F	2		0359	.31	.47			
GRP60477	30	0642	0657	0647	S13	E50	.789	13043	4.0	15	--F				.64				4 4 4 5
CATA	30	0640	0650D	0640	S12	E50	.786	13043	3.0	10D	-N	1		0640	.58	.93		(186)	
MANI	30	0643	0655D	0651	S13	E51	.799	13043	3.1	12D	-N	2		0651	.72	1.18			F
ATHN	30	0645E	0655	0647	S13	E47	.757	13043	2.8	10D	-F	1		0647	.34	.41			
ABST	30	0651E	0701	0651	S14	E52	.811	13043	3.2	10D	-F		P	0651	.90	1.48			DJK
4 STATIONS REPORTING GROUP 60478. 2 STATIONS OBSERVING AND NOT REPORTING.																			
GRP60478	30	0703	0739	0709	S13	E44	.724	13043	3.6	36	1N				1.60				3 3 3 4
ABST	30	0703	0710D	0705	S13	E45	.736	13043	2.7	7D	1N		P	0705	2.07	3.88			FJK
ATHN	30	0706E	0709D	0709D	S13	E44	.724	13043	2.6	3D	-N	3	V		.66				F
MANI	30	0709E	0739	0712	S13	E44	.724	13043	2.6	30D	1B	2		0712	2.06	2.98			FE
60478	30	0719	0803	0725	S13	E44	.724	13043	3.6	44	*-N				1.50				2 2 2 5
UPIC	30	0719	0820	0721U	S13	E43	.713	13043	2.5	61	1B		P	0721	2.10				K
ABST	30	0719E	0745	0728	S13	E45	.736	13043	2.7	26D	-F		P	0728	.90	1.30			DJK
ABST	30	0719E	0745	0730	S13	E46	.747	13043	2.8	26D	-F		P	0730	.90	1.30			DJK
GRP60480	30	0758	0820	0805	S14	E54	.830	13043	4.4	22	--F				.81				2 2 2 6
ABST	30	0755E	0809	0805	S13	E51	.799	13043	3.2	14D	-F		P	0805	.63	1.08			DJ
ARCE	30	0800E	0820D		S14	E56	.848	13043	3.5	20D	-N		C	0804	.90	1.98			B
484 RAMY	30	1536	1609	1545	S13	E48	.768	13043	3.3	33	--N	4	C		.65				DE 3
486 ATHN	30	1635E	1641	1635	S10	W02	.223	13030	30.9	6D	--F	1		1635	.52	.58			2
487 PALE	30	1827E	1838	1827U	S09	W06	.228	13038	30.3	11D	--F	2	C		.45				F 3
488 HUAN	30	1941	1943	1942	S14	E37	.647	13043	2.6	2	--F	1	C	1942	.31	.41			3
489 PALE	30	1944	1959	1947	S09	W06	.228	13030	30.4	15	--N	2	C		.63				F 3
490 HUAN	30	1954	2001	1957	S14	E36	.635	13043	2.5	7	--F	1	C	1957	.15	.28			D 3
GRP60491	30	2026	2034	2028	S14	E41	.694	13043	3.9	8	--F				.35				2 2 2 4
RAMY	30	2023	2031	2025	S13	E44	.724	13043	3.1	8	-F	3	C		.28				DE
HUAN	30	2029	2036	2030	S14	E37	.647	13043	2.6	7	-F	2	C	2030	.41	.54			E
492 PALE	30	2048	2052	2045	S16	E37	.657	13043	2.6	12	--F	2	C		.19				F 3
493 HUAN	30	2057	2111	2058	S09	W05	.221	13038	30.5	14	--F	2	C	2058	.31	.32			3
GRP60494	30	2119	2132	2122	S14	E38	.659	13043	3.7	13	--F				.65				3 2 2 3
RAMY	30	2101E	2128	2105	S13	E37	.642	13043	2.7	27D	-F	3	C		.28				DE
PALE	30	2114	2127	2117	S14	E38	.659	13043	2.7	13	-F	2	V		.67				F
HUAN	30	2124	2137	2126	S14	E37	.647	13043	2.7	13	-F	2	C	2126	.62	.82			D
495 PALE	30	2223	2310D	2229	S12	E45	.732	13043	4.3	47D	SB		V		1.13				1
495 PALE	30	2223	2310D	2247	S12	E45	.732	13043	4.3	47D	1B		V		1.65				1

In the importance column "--" signifies the subflare has been confirmed by the NOAA grouping program but is not included in the I.A.U. Quarterly Bulletin on Solar Activity. These subflares are also not included in the Flare Index below.

DAILY FLARE INDICES

Date	Flare Index	HR OBS	Date	Flare Index	HR OBS	Date	Flare Index	HR OBS
740601	6.61	22.6	740610	15.31	20.4	740620	0.00	23.5
740602	54.53	20.5	740611	17.57	20.9	740621	15.25	23.9
740603	15.98	23.6	740612	0.00	23.3	740622	1.84	23.5
740604	134.09	23.1	740613	0.00	22.7	740623	86.57	23.6
740605	0.00	21.3	740614	41.38	22.4	740624	22.18	23.9
740606	57.03	20.7	740615	0.00	21.9	740627	8.51	22.6
740607	59.65	21.1	740616	0.00	22.5	740628	0.00	22.7
740608	0.00	22.6	740617	0.00	22.8	740629	32.93	23.4
740609	0.00	23.8	740618	5.63	23.4	740630	32.41	24.0

When no Flare Index is given, it is 0 for that day.

Hα SOLAR FLARES
Unconfirmed
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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE		OBS.		MEASUREMENTS					REMARKS
	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE		TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg.	MAX. INT. %	
293 PALE	01	0305E	0320D	0308U	S17	E38	.555	12972	3.4	150	-F	2	V			.36				4
296 MONT	01	0817	0832	0828	S11	E31	.537	12972	3.7	15	-N		C		0828	.52				E 4
307 TEHR	02	0658	0705D	0702	S13	E62	.888	12977	6.9	70	-N	3	C			.32				5
308 TEHR	02	0829E	0842D	0832U	S14	E62	.889	12977	7.0	130	-N	3	C			.37				5
310 TEHR	02	1154	1204D	1156	S12	E58	.854	12977	6.8	100	-N	3	V			.25				DE 6
317 MONT	03	0705	0730	0709	S09	E39	.640	12995	6.2	25	-F		C		0709	.21				6
318 MONT	03	1344	1357	1347	S05	W11	.206	12970	2.7	13	-F		C		1347	.41				10
319 MONT	03	1418	1440	1421	S05	W11	.206	12970	2.8	22	-N		C		1421	.62				E 7
320 CATA	03	1510	1515	1510	S16	E24	.474	12977	5.4	5	-N	3			1510	1.44	1.64		(151)	8
321 HUAN	03	1712	1716	1713	S11	E01	.184	12972	3.8	4	-F	1	C		1713	.36	.37			5
GRP60332	04	1137	1151	1146	S12	W14	.311	12972	3.4	14	-F					.71				2 2 2 7
RAMY	04	1137	1151	1142	S11	W14	.301	12972	3.4	14	-F	3	C			.28				DE
KHAR	04	1142E	1150D	1149	S12	W13	.299	12972	3.5	80	-F		C		1149	1.13	1.20			
339 RAMY	06	1546	1604	1559	S11	W27	.484	12972	4.6	18	-F	3	C			.19				DE 4
GRP60342	07	1132	1150	1138	S15	W20	.428	12977	6.0	18	-F					.27				2 2 2 7
MONT	07	1131	1144	1133	S15	W20	.420	12977	6.0	13	-F		C		1133	.21				
RAMY	07	1132	1156	1142	S14	W20	.411	12977	6.0	24	-F	2	C			.33				DE
344 KHAR	08	1114E	1121D	1114	N06	E77	.975	12993	14.2	70	1F		P							5
345 CATA	08	1350E	1600D	1450	S13	W64	.904	12972	3.8	130D	3N	3			1450	8.11	19.03		(178)	U 5
347 HUAN	09	1348	1356	1349	N05	E64	.899	12993	14.4	8	-F	1	C							5
348 HUAN	09	1425	1435	1430	S07	W48	.748	12995	6.0	10	-F	1	C							5
349 TEHR	09	1455	1507D	1504	N05	W01	.084	12981	9.5	120	-N	3	C			.36				F 5
350 HUAN	09	1601	1613	1604	S07	W49	.759	12995	6.0	12	-F	1	C		1604	.41	.64			4
365 MONT	11	0742E	0749	0742	S10	W74	.963	12977	5.8	70	-N		C		0742	.21				D 4
367 MONT	11	0909	0919	0913	S10	W75	.967	12977	5.8	10	-F		C		0913	.21				6
369 MONT	11	1001	1005	1003	S09	W75	.967	12977	5.8	4	-N		C		1003	.21				D 6
370 MONT	11	1013	1038	1018	S09	W75	.967	12977	5.8	25	-N		C		1018	.41				EK 5
371 MONT	11	1056E	1107	1101	N05	W32	.534	12981	9.1	110	-F		C		1101	.72				5
374 PALE	11	1739E	1744D	1739U	N03	E34	.560	12993	14.3	50	-F	2	V			.62				4
377 MONT	12	0712	0729	0718	S09	W86	.998	12977	5.9	17	-F		C		0718	.21				6
378 ABST	12	0713	0725	0714	N06	E20	.353	12993	13.8	12	-N		C		0714	1.79	1.90		58	E 6
379 MONT	12	0800	0805	0801	N05	W50	.767	12981	8.6	6	-F		C		0801	.21				7
380 ATHN	12	1123E	1144	1132	S05	W88	.999	12995	5.9	210	-N	1								4
GRP60381	12	1226	1244	1235	S09	W89	1.000	12977	5.8	18	-N					.21				1 1 1 8
MONT	12	1226	1237	1233	S09	W88	.999	12977	5.9	11	-F		C		1233	.21				
MONT	12	1233	1244	1235	S10	W90	1.000	12977	5.8	11	-N		C		1235	.21				D
382 MONT	12	1324	1329	1326	S16	W86	.998	12977	6.1	5	-N		C		1326	.41				D 7
383 MONT	12	1326	1338	1328	S13	E90	1.000	13002	19.3	12	-F		C		1328	.21				7
384 MONT	12	1339	1402	1344	S14	W90	1.000	12977	5.8	23	-F		C		1344	.21				8
385 MONT	12	1412	1417	1415	S09	W90	1.000	12977	5.8	5	-N		C		1415	.21				D 6
387 MCMA	12	1620	1635	1622	N05	E17	.301	12993	14.0	15	-F		C		1622	.52	.50			E 4
389 ATHN	13	0623	0633	0627	N08	W67	.921	12981	8.2	10	-F	1			0627	.68	1.11			4
390 MONT	14	0809	0828	0824	S18	W90	1.000	12990	7.6	19	-F		C		0824	.21				6

Hα SOLAR FLARES
Unconfirmed
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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS. COND.	OBS. TYPE	MEASUREMENTS					REMARKS
	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
392 MONT	14	1126	1133D	1133	N06	W80	.985	12981	8.5	7D	-N		C	1133	.41				DG 6
393 MONT	14	1314	1318	1316	N06	W81	.988	12981	8.5	4	-N		C	1316	.21				DG 8
398 TEHR	16	1214	1235	1222	S17	E37	.652	13002	19.3	21	-N	3	C		.19				DE 4
399 ATHN	17	0435	0448	0438	S12	E25	.472	13002	19.1	13	-N	3	V		.50				DE 3
400 MONT	17	0639E	0742	0654	S11	E21	.410	13002	18.9	63D	-N		C	0654	1.86				BE 4
GRP60402	18	0453	0506	0456	S17	E12	.372	13002	19.1	13	-F				.67				2 2 2 5
ATHN	18	0453	0502	0455	S18	E11	.377	13002	19.0	9	-F	1	V		.50				DE
MANI	18	0453	0510	0456	S16	E13	.368	13002	19.2	17	-N	2		0456	.83	.88			F
404 UPIC	18	0735	0740	0735U	S17	E16	.410	13002	19.5	5	-F		P	0735	.63				7
405 UPIC	18	0800	0820	0805	S17	E16	.410	13002	19.5	20	-F		P	0805	.42				7
406 MEUD	18	0853	0902		S15	E11	.336	13002	19.2	9	-F		C	0857	.62	.60			E 5
408 KHAR	18	1058	1104		S12	E08	.268	13002	19.1	6	-F			1058	.23	.23			7
409 ATHN	18	1319	1331	1323	S12	E05	.246	13002	18.9	12	-F	1		1323	.68	.64			3
410 ABST	19	0734	0740	0737	S16	W03	.304	13002	19.1	6	-F		C	0737	.90	.90			D 7
411 PALE	19	1840E	1849	1843U	S20	E02	.367	13002	19.9	9D	-F	3	V		.62				DE 4
413 PALE	19	2207E	2220	2210	S17	W03	.321	13002	19.7	13D	-N	3	V		.93				F 3
415 MONT	20	1326	1329	1327	S18	W17	.435	13002	19.3	3	-F		C	1327	.41				7
416 MONT	20	1340	1358	1345	S19	W11	.395	13002	19.7	18	-N		C	1345	.52				6
421 PALE	22	0205E	0219	0211	N09	E22	.391	13015	23.7	14D	-F	2	C		.19				DE 4
425 RAMY	24	1226	1244	1231	S05	E72	.953	13030	29.9	18	-F	3	C		.46				DE 7
GRP60426	24	1449	1505	1452	N10	W12	.247	13015	23.7	16	-F				.47				2 2 2 7
RAMY	24	1446	1503	1449U	N10	W12	.247	13015	23.7	17	-F	3	C		.28				DE
ATHN	24	1451	1507	1455	N09	W12	.239	13015	23.7	16	-F	3	V		.66				DE
429 UPIC	26	0720E	0745U		N10	W36	.596	13015	23.6	25D	-F		P	0720	.85				KF 8
430 UPIC	26	0805	0810	0805U	N11	W35	.585	13015	23.7	5	-F		P	0805	.63				F 9
431 MONT	26	0810	0821	0813	S11	E90	1.000	13037	2.1	11	-F		C	0813	.21				9
432 MONT	26	0939	0944D	0944	S11	E90	1.000	13037	2.2	5D	-N		C	0944	.21				D 8
433 UPIC	26	1120E	1125		N11	W37	.612	13015	23.7	5D	-F		P	1120	.42				8
434 MONT	26	1322	1334	1328	S11	E90	1.000	13037	2.3	12	-N		C	1328	.21				D 8
437 ABST	28	0704	0722	0708	S18	E67	.934	13043	2.3	18	-F		C	0708	.90				E 7
438 ABST	28	0730	0811	0732	S14	E80	.987	13043	3.3	41	1F		P	0732	.81				DK 6
440 MONT	28	1021E	1030D	1023	S13	E71	.952	13043	2.8	9D	-F		C	1023	.21				6
441 ABST	28	1053	1105	1058	S12	E78	.981	13043	3.3	12	1N		C	1058	1.35				E 8
446 ABST	29	0258E	0310	0250	S15	E69	.943	13043	3.3	20D	1F		P	0250	1.80				EJZ 3
GRP60451	29	0637	0659	0648	S13	E62	.895	13043	3.9	22	-F				.96				2 2 2 8
ABST	29	0633	0700	0638	S13	E66	.923	13043	3.2	27	-F		C	0638	.63			58	DJZ
ABST	29	0641	0730	0649	S15	E58	.866	13043	2.6	49	-N		C	0649	.99	1.90			DJZ
MANI	29	0643E	0657	0647	S13	E59	.871	13043	2.7	14D	-F	1		0647	.52	.96			
MANI	29	0643E	0649	0643U	S11	E65	.914	13043	3.2	6D	-F	1		0643	.41	.81			F
452 ATHN	29	0807	0818	0812	S11	E39	.658	13037	1.3	11	-N	4	C		.33				DE 6
GRP60453	29	0825	0845	0830	S15	E53	.822	13043	3.3	20	-N				.87				2 1 1 6
CATA	29	0825	0845	C830	S15	E53	.822	13043	2.3	20	-N	3		0830	.87	1.52		(174)	
ABST	29	0836	0914D	0847	S15	E61	.890	13043	2.9	38D	1N		P	0847	1.79	3.40			EJ
454 ATHN	29	0923	0931	0925	S13	E60	.879	13043	2.9	8	-F	4	C		.17				DE 5

Hα SOLAR FLARES
Unconfirmed
JUNE 1974

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE JUNE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
GRP68455	29	0950	1010	1000	S13	E56	.845	13043	3.6	20	-B				.58				2 1 1 5
CATA	29	0958	1010	1000	S13	E56	.845	13043	2.6	20	-B	3		1000	.58	1.08		(234)	
UPIC	29	1009	1020	1015	S14	E57	.856	13043	2.7	11	1N		P	1015	1.47				
457 ATHN	29	1302E	1308	1303	S11	E36	.620	13037	1.2	60	-F	1		1303	.17	.18			5
459 MCMA	29	1305	1339	1312	S14	E54	.829	13043	2.6	34	-N		C	1312	.83	1.40			E 5
462 MCMA	29	1448	1530	1448	S09	E13	.299	13030	30.6	50	-N		C	1448	.31	.30			D 5
466 HUAN	29	1828	1836	1830	S13	E53	.818	13043	2.7	8	-F	1	C	1830	.41	.72			4
473 VORO	30	0304	0308	0305	S11	E45	.729	13043	2.5	4	-N		C	0305	.65	.93		60	D 5
475 MANI	30	0422	0437D	0424	S17	E43	.729	13043	2.4	15D	-N	2		0424	.62	.91			F 6
476 ABST	30	0559	0605	0600	S10	E05	.236	13030	30.6	6	-F		C	0600	.90	.90			DJZV 7
GRP60479	30	0754	0811	0757	S15	E46	.753	13043	3.8	17	-F				1.08				2 2 2 7
MANI	30	0754	0757D	0757U	S14	E46	.750	13043	2.8	3D	-N	2		0757	1.08	1.65			
ABST	30	0755E	0811	0756	S15	E46	.753	13043	2.8	16D	-F		P	0756	1.08	1.60			EJ
481 CATA	30	0905	0920D	0910	S13	E44	.724	13043	2.7	15D	-B	3		0910	1.16	1.68		(214)	5
482 ABST	30	0940	1015	0944	S12	E55	.835	13043	3.5	35	1N		C	0944	1.35	2.40			EJ 7
483 ABST	30	1057	1129	1103	S13	E45	.736	13043	2.8	32	-F		C	1103	.90	1.40			D 5
485 RAMY	30	1538E	1607	1554	S12	E45	.732	13043	3.0	29D	-F	3	V		.99				DE 3

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by a high speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H and K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked asymmetry in Hα line suggests ejection of high velocity material.
S = Brightness follows disappearance of filament (same position).
T = Region active all day.
U = Two bright branches, parallel (||) or converging (Y).
V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

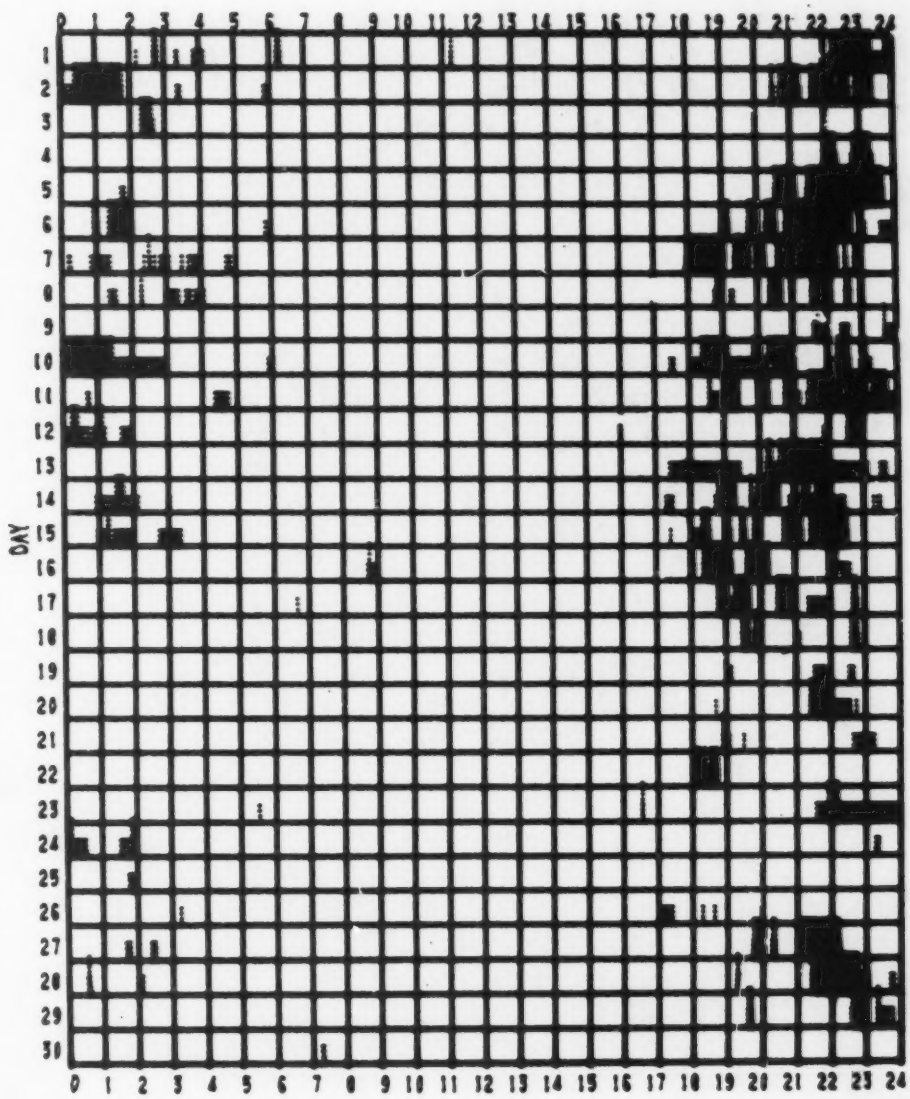
Note:
A line of explanation has been added before each flare event having more than one maxima. The total number of stations reporting some part of the event is given. The number of stations observing at the time of the principal maximum but not reporting the event is given in the second statement. Care should be exercised in utilizing the numbers in the remarks column. The first number is the number of stations reporting the individual maximum, and not the total number of stations reporting some part of the flare event. The last number is the number of stations reporting at the time of the individual maximum and not necessarily the total number of stations observing during the flare event. GRP numbers may appear several times in order to indicate secondary maxima. An asterisk beside an importance indicates a secondary maximum. The word "GRP" has also been omitted to aid in pointing to this condition.
When it is impossible to determine the time of Maximum Phase from the individual reports the time of Area Measurements is used. This time appears in parentheses. For Flares reported by only one station the last 3 digits of the group number appear to the left of the station code.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

JUNE 1974

HOUR–UT



Observatories included in total patrol:

Abastumani	Culgoora	Kiev	Meudon	Teheran
Arcetri	Herstmonceux	Kodaikanal	Monte Mario	Upice
Athenes	Huancayo	Locarno	Palehua	Voroshilov
Bucharest	Hurbanovo	Manila	Ramey	Wendelstein
Catania	Kharkov	McMath-Hulbert	Tashkent	Zürich

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1974

JUN 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
1	6100	KISV	1	0659.5	0700.5	1	3.0			
	9240	ARCE	21	0828 U	0858	55 U				
	9100	GORK	20	0828	0830	8.5	6.3	2.6		
	8800	ATHN	1	0828.2	0829.2	1.9	5.7	1.9		
	4995	ATHN	1	0828.3	0829.9	2.6	1.9	.5		
	9240	ARCE	2	0916	0918.2	3				
	8800	ATHN	1	1154	1154.6	1.2	3.9	1.2		
	4995	ATHN	1	1154.1	1154.5	2.7	2.1	.6		
	2800	OTTA	8	1154.4	1154.4	.5	1.6	0.8		
	2695	ATHN	1	1154.1	1154.5	2	2.1	.6		
	2800	OTTA	27	1535		95	.8	0.7		
	2800	OTTA	24	1535	1548	13	.8	0.4		
	1420	BOUL	4	1542.5	1544.5	4	8.0	3.0		
	2695	BOUL	3	1543.5	1546	5.5	6.0	2.0		
	1415	SGMR	40	1543	1544.7	4.9	8.2	4.0		
	930	BORD	40	1543	1543	4	24.0	2.0		
	2800	OTTA	24	1548		62	.8			
	2800	OTTA	26	1650	1710	20	- .8	-0.4		
	2800	OTTA	21	1720	1847	155	1.8	1.0		
	2800	OTTA	20	1735	1740	11	.8	0.4		
	2800	OTTA	20	2000	2025	60	1.8	0.9		
	2800	OTTA	27	2105		105	.8	0.7		
	2800	OTTA	24	2105	2120	15	.8	0.4		
	2800	OTTA	24	2120		70	.8			
	18	MCMA	41	2138	2140	3			1	
	2800	OTTA	1	2147	2147.8	1	1.0	0.5		
	2800	OTTA	26	2230	2250	20	.8	0.4		
	2695	PENT	25	2330	0018	105	4.0	2.0		
2	1420	BOUL	45	0039	0048	10.5	19.0	7.0		
	9400	TYKW	45	0042	0047.6	8	66.0	9.0		
	8800	MANI	4	0042.5	0047.7	7.9	58.0	7.3		
	4995	MANI	4	0042.5	0047.7	7.9	36.4	4.2		
	4995	BOUL	45	0042	0047	9	34.0	11.0		
	3750	TYKW	45	0042	0047.6	8	13.0	4.0		
	2695	MANI	2	0042.5	0047.7	7.9	9.2	1.7		
	2695	BOUL	45	0042.5	0048.5	14	8.0	2.0		
	2695	PENT	45	0042.6	0047.8	8.4	6.0	2.2		
	2000	TYKW	45	0042	0047.6	8	8.0	2.0		
	1415	MANI	4	0042.5	0047.7	7.4	23.0	2.0		
	1000	TYKW	45	0042	0047.6	8	28.0	5.0		
	606	MANI	40	0042.4	0047.3	7.1	20.6	5.4		
	500	HIRA	41	0042.9	0043	6.5	110.0			
	9400	TYKW	29	0050		50	5.0	2.0		
	3750	TYKW	29	0050		40	2.0	1.0		
	2000	TYKW	29	0050		10	.8	0.4		
	2695	PENT	29	0051	0051	7	1.0	0.5		
	4995	BOUL	3	0106	0107.5	2.5	9.0	3.0		
	2695	BOUL	3	0107	0108	1.5	4.0	1.0		
	1420	BOUL	45	0111.5	0112.5	4.5	2.0	1.0		
	2695	BOUL	3	0113	0135	1.5	3.0	1.0		
	2695	PENT	24	0118		30 D	4.0			
	950	GORK	21	0408.2		47.7	11.0	6.0		
	9400	TYKW	28	0422.5	0423	3	3.0	1.0		
	3750	TYKW	28	0422.5	0423	3	3.0	1.0		
	2000	TYKW	28	0422.5	0423	3	2.0	0.7		
	1000	TYKW	28	0422.5	0423	3	2.0	0.5		
	650	GORK	21	0422.9	0428.5	15.6	25.0	5.0		
	100	GORK	41	0423.1	0423.3	12.7	20.0			
	100	GORK		0423.1	0425.2		40.0			
	100	GORK		0423.1	0427.6U		8000.0			
	8800	MANI	47	0424.4	0426.1	7.8	1250.0	275.0		
	8800	ATHN	4	0424.4U	0426.1U	4 U	400.0D	100.0D		
	4995	MANI	47	0424.4	0426.2	9.2	720.0	179.0		
	4995	ATHN	4	0424.4U	0426.2U	4.8U	275.0D	70.0D		
	2695	MANI	4	0424.5	0426.2	11	360.0	90.0		
	1415	MANI	4	0424.5	0426.3	10.9	205.0	61.0		
	606	MANI	47	0424.5	0426.4	11.7	8200.0	750.0		
	9400	TYKW	47	0425.5	0426.2	2.5	1550.0	450.0		
	3750	TYKW	45	0425.5	0426.3	4.5	420.0	60.0		
	2695	ATHN	4	0425.4	0426.3	3.2	363.2	109.0		
	2000	TYKW	45	0425.5	0426.2	1 D	180.0			
	1415	ATHN	4	0425.4	0426.3	3.9	203.1	58.0		
	1000	TYKW	45	0425.5	0426.9	14.5	93.0	22.0		
	950	GORK	46	0425.8	0426.7	7.7	233.0			
	950	GORK		0425.8	0427.3		324.0			
	650	GORK	4	0425.8	0427.1	2.7	300.0	150.0		
	500	HIRA	45	0425		5		290.0		
	500	HIRA		0425	0426.5		840.0			
	500	HIRA		0425	0427.3		840.0			
	200	HIRA	45	0425.5		2.5	180.0D	110.0D		
	100	HIRA	45	0425.8	0426.6	7.5	1000.0D	100.0D		
	29	UPIC	45	0425.5	0427	4.5				
	9400	TYKW	29	0428		12	12.0	4.0		
	8800	ATHN	29	0428.4	0428.4	11.6	15.2	5.7		
	2695	ATHN	29	0428.6	0428.6	5.2	20.4	6.8		
	4995	ATHN	29	0429.2	0429.2	5.6	6.9	2.9		
	1415	ATHN	29	0429.3	0429.3	3.9	14.4	4.8		
	3750	TYKW	29	0430		10	7.0	2.0		
	650	GORK	40	0430.9	0432.8	2.1	23.0			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1974

JUN 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	950	GORK	4	0521.9	0522.1	.9	12.0	3.2		
	650	GORK	4	0521.7	0522.1U	1.1	130.0D			
	237	TRST	42	0735.7	0739.1	6	37.0			
	260	ONDR	45	0739	0739	1	50.0			
	221	ABST	48	0840.5	0841.2	2.2	39.0	11.0		
	260	ONDR	45	0906	0908	3	60.0			
	237	TRST	41	0906.2	0906.6	2.3	84.0			
	237	TRST		0906.2	0907.7		86.0			
	207	IZMI	6	0906.3	0906.6	1	200.0	90.0		
	200	GORK	6	0906.2	0906.7	2.3	400.0D			
	200	HIRA	45	0906.5		2	180.0D	80.0D		
	100	GORK	6	0906.2	0906.7	1.2	30.0	15.0		
	536	ONDR	8	1021	1021	.5	50.0			
	408	TRST	42	1021.1	1021.4	1.5	12.0			
	260	ONDR	45	1231	1234.5	10	25.0			
	18	MCMA	41	1618	1621	3			1	
	2800	OTTA	1	1630.5	1630.7	1	2.4	1.2		
	18	MCMA	6	1632	1633	1			1	
	2800	OTTA	21	2140	2240	100	2.6	1.4		
	2800	OTTA	1	2201	2202	2	1.4	0.7		
	2695	BOUL	3	2202	2203	2	4.0	1.0		
	2800	OTTA	20	2207	2211	24	5.0	2.5		
	1420	BOUL	45	2207	2209	5.5	2.0	1.0		
	2695	BOUL	21	2209	2212	10	6.0	2.0		
	2695	PENT	32	2350	0020	105	-3.6	-1.8		
3	18	MCMA	6	0000	0001	1				
	18	MCMA	41	0030	0032	3			1	
	100	GORK	41	0325.4	0326.4	3.2			1	
	100	GORK		0325.4	0328.3		40.0D			
	100	GORK	41	0818	0818.2	4	15.0			
	100	GORK		0818	0819.6		30.0			
	260	ONDR	41	0820	0920	200	15.0			
	1420	BOUL	3	1506	1508.5	4.5	30.0			
	2800	OTTA	1	1508	1508.1	1	2.0	1.0		
	2800	OTTA	21	1708	1723	36	1.8	0.9		
	2800	OTTA	20	1734	1736	10	1.4	0.7		
	2800	OTTA	20	1918	1919	10	1.4	0.7		
	2800	OTTA	23	1934	2015	75	1.6	0.8		
	2800	OTTA	22	1950	1954.5	15	3.2	1.8		
	2695	BOUL	45	1950.5	1955.5	14.5	7.0	2.6		
	2800	OTTA	26	2105	2200	55	8.0	2.0		
	2800	OTTA	24	2215	2220	5	-1.8	-0.9		
	2695	PENT	27	2215		190	1.8	0.9		
	2695	PENT	24	2220		165	1.8	1.7		
	2800	OTTA	20	2227	2232	23	1.8	0.9		
	2695	BOUL	3	2228	2232.5	12.5	4.0	1.0		
	1420	BOUL	8	2230.5	2231	1	3.0	1.0		
	2695	PENT	21	2338	2350	87	5.8	2.6		
	3750	TYKW	28	2345	2350	24	4.0	2.0		
	2000	TYKW	28	2347	2350	21	3.0	1.0		
	1420	BOUL	3	2347.5	2350	4.5	1.0			
	1000	TYKW	45	2349.5	2351	2	1.5	0.4		
	2695	BOUL	3	2350	2352.5	5	4.0	1.0		
	2000	TYKW	45	2408	2412	26	60.0	12.0		
	3750	TYKW	45	2409	2411	38	61.0	12.0		
	1000	TYKW	45	2409	2414.2	25	23.0	5.0		
	9400	TYKW	20	2410	2413.4	35	27.0	11.0		
	1000	TYKW	32	2419	2600	305	7.0	5.0		
	2000	TYKW	32	2434	2600	300	7.0	5.0		
	9400	TYKW	32	2445	2620	285	6.0	3.0		
	3750	TYKW	32	2447	2620	280	7.0	4.0		
4	2695	BOUL	45	0006.5	0013.5U	39	57.0U	14.0U		
	4995	MANI	4	0008.6	0010.9	12.1	22.1	9.2		
	4995	ROUL	45	0008	0011	25.5	49.0	11.0		
	2695	PENT	4	0008	0012	14	71.0	24.0		
	2695	MANI	4	0008.6	0011.9	12.8	46.9	13.4		
	1420	BOUL	45	0008	0013	12	34.0	13.0		
	1415	MANI	4	0008.6	0012.4	11.4	31.7	10.4		
	8800	MANI	4	0009.5	0011.1	9.6	17.5	8.8		
	606	MANI	4	0009	0010.2	11.2	24.2	6.6		
	500	HIRA	5	0009	0014.5	8	10.0	1.0		
	200	HIRA	45	0009.7		8	180.0D	80.0D		
	100	HIRA	45	0009.8	0011	8	1000.0D	100.0D		
	202	VORO	24	0010	0012	30	100.0			
	100	HIRA	45	0021	0022.4	44	300.0	10.0		
	2695	PENT	30	0022	0022	33	7.0	3.5		
	200	HIRA	45	0028		11	180.0D	50.0D		
	1420	BOUL	45	0030.5	0030.5	9.5	6.0	2.0		
	1415	MANI	2	0030.9	0031.2	4.6	2.6	.5		
	2695	PENT	2	0031	0031.5	8	7.0	1.8		
	4995	MANI	1	0032	0032.6	3.5	1.8	.9		
	2695	MANI	1	0032	0032.5	3.5	6.0	2.0		
	2695	PENT	26	0105	0125	20	-1.8	-0.9		
	9500	BERL	20	1054	1130.2	71	3.9			
	8800	SGMR	1	1117.9	1118	4.6	4.2	1.3		
	6100	KISV	45	1117.7	1119.2	7	5.0			
	4995	SGMR	22	1117.8	1119.4	17	5.6	3.4		
	4995	ATHN	2	1117.8	1119.6	3.3	4.0	1.2		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1974

DAY	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	3000	BERL	4	1117	1118.4	8	12.0	3.0		
	2800	OTTA	45	1117.5	1118.1	2.7	11.4	6.4		
	2695	SGMR	22	1117.4	1118.1	15.1	9.2	5.5		
	2695	ATHN	4	1117.7	1118.2	3.6	11.2	3.3		
	1470	BERL		1117.5	1118	4.5	4 5.3	* 1.6		
	1415	SGMR	20	1117.2	1118.1	12.3	4.6	2.3		
	1415	ATHN	1	1117.7	1118.2	3.1	2.6	.8		
	950	BORD	45	1117	1117.8	1	34.0	2.0		
	8800	ATHN	1	1118.1	1119.6	3.9	3.9	1.2		
	2800	OTTA	29	1120.2	1120.2	180	3.8	1.7		
	2800	OTTA	20	2125	2130	80	2.8	1.6		
	9300	IRKU	1	2253.8	2254	1	20.0			
	202	VORO	24	2323	2324	2	22.0			
5	2800	OTTA	20	1420	1432	58	1.2	0.6		
	18	WCMA	6	1509	1510	2			1	
	18	WCMA	8	1708	1709	2			1	
	245	SGMR	8	1952.7	1953.5	2.6	7.7	3.1		
	100	HIRA	45	1953.5	1953.8	1.5	180.0	50.0	1	
	18	WCMA	41	1954	1955	4			1	
	18	WCMA	6	2022	2224	2			1	
6	9300	IRKU	1	0428.3	0428.8	1	9.0			
	100	GORK	44	0710		350 D		5.0		
	260	ONDR	41	0730	1342	460	30.0			
	245	SGMR	43	1327.6	2122.9	645.4D	18.6			
	200	HIRA	44	1920 E	0312	870 D	26.0	15.0		
	202	VORO	44	2100	0057	240		10.0		
	29	UPIC	45	1132	1132.5	1.5				
	18	WCMA	8	1244	1246	2			1	
	245	SGMR	8	1245	1245.2	4.6	37.2	11.2		
	245	SGMR	41	1306.7	1315.3	9	10.2	3.1		
	29	UPIC	45	1309	1310.5	5.5				
	29	UPIC	45	1335	1335.5	1				
	550	KIEV	6	1537.2	1540.7	5	21.0			
	2695	BOUL	45	1538.5	1542.5U	8.5	58.0U	23.0U		
	1415	SGMR	4	1538.8	1540.2	3.7	362.0	109.0		
	410	SGMR	6	1538.8	1540.6	5.5	14.8	4.5		
	237	TRST	41	1538.9	1540.7	2.7	520.0			
	18	BOUL	8	1538	1544	7				
	10700	PENN	3	1539.8	1541.5	11.8	58.1	13.3	2	
	9400	HUAN	3	1539.6	1540.9	4	68.6	31.4		
	4995	BOUL	45	1539	1541	5.5	93.0	34.0		
	2695	ATHN	4	1539.8	1540.8	3.1	4.9	1.5		
	1420	BOUL	45	1539	1541	4.5	170.0	48.0		
	1415	ATHN	4	1539	1540.1	4.3	33.9	9.4		
	960	PENN	45	1539	1540.3	5.6	46.0D	2.7		
	606	SGMR	40	1539	1540.8	5.6	17.8	10.7		
	245	SGMR	8	1539	1540.1	3.6	186.0	56.0		
	29	UPIC	45	1539		8				
	18	WCMA	42	1539	1543	35				
	15400	SGMR	4	1540	1541.4	9.5	49.8	14.9	3	
	9240	ARCE	3	1540.4	1541.8	5.2				
	8800	ATHN	4	1540.2	1541.8	6.1	7.1	2.5		
	7000	SAOP	4	1540.9	1542.5	4.8	89.0	45.0		
	4995	ATHN	4	1540	1540.8	7.9	7.9	2.4		
	1415	SGMR	29	1542.5	1542.5	34.7	3.7	1.5		
	9400	HUAN	29	1543.6	1543.6	8.8	6.2	3.9		
	228	HARS	45	1543.5	1545	4	120.0	35.0		
	9240	ARCE	29	1545.6		10.3				
	7000	SAOP	29	1545.6		74.4				
	100	HIRA	45	1935.5	1936.5	2	70.0	20.0		
	100	HIRA	45	2151.9	2152	2	100.0	25.0		
	410	SGMR	6	2201.6	2201.9	.7	27.4	8.2		
	245	SGMR	6	2201.4	2202	1.7	17.7	5.3		
	18	WCMA	42	2335	2342	15				
7	100	GORK	44	0308 E		592 D		5.0	3	
	100	GORK	41	0335.2	0336.2	9.8	50.0D			
	100	GORK		0335.2	0338.4		100.0			
	260	ONDR	44	0637	1301.5	523	90.0			
	221	ABST	44	0700	0830	200	6.0			
	113	POTS	45	0850.5	0850.6	.5	100.0	20.0		
	200	GORK	44	0900		240		5.0		
	245	SGMR	44	0911 E	1650.9	903 D	55.9			
	200	HIRA	44	1920 E	0011	870 D	56.0	30.0		
	202	VORO	44	2100	0017	240		27.0		
	3000	BERL	20	0908.5	0940	77	5.9			
	9500	BERL	20	0910	0931	80	8.1			
	29	UPIC	45	0916	0916.5	1.5				
	1470	BERL	20	0918	0931.5	72	2.0			
	100	GORK	41	0920.1	0920.4	1.8	45.0D			
	100	GORK		0920.1	0921.3		45.0			
	113	POTS	45	0958.3	0959.4	2.2D	200.0			
	100	GORK	41	0958.3	0958.6	3 D	50.0D			
	100	GORK		0958.3	0959.5					
	29	UPIC	45	0959	1000.5	3				
	100	GORK	8	1011.6	1014.1	6.8	45.0D			
	3000	BERL	20	1100	1206.3	120	4.0			
	1470	BERL	20	1130	1159 U	70	1.2			

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	100	GORK	6	1158.6	1159.2	1.2	45.0D			
	100	GORK	41	1240.5	1241.3	3.6	40.0D			
	100	GORK		1240.5	1242.6		40.0D			
	100	GORK	41	1248.9	1249.2	8	40.0D			
	113	POTS	45	1357.1	1357.1	1.8	600.0	60.0		
	930	RORD	45	1625	1626.7	1	14.0	2.0		
	18	MCMA	41	1801	1803	3				
	4995	SGMR	3	2116.4	2116.6	.5	41.4	12.4	1	
	2695	SGMR	3	2116.3	2116.6	.5	13.7	4.1		
	1415	SGMR	3	2116.2	2116.6	.6	45.8	13.7		
	606	SGMR	3	2116.5	2116.7	1.7	92.6	27.8		
	410	SGMR	6	2117.1	2117.6	.7	170.4	68.2		
	245	SGMR	6	2117.2	2117.5	.5	79.4	23.8		
	1415	SGMR	1	2121.9	2122	.3	8.7	2.6		
	410	SGMR	6	2121.9	2122.2	.5	9.8	2.9		
	606	SGMR	8	2122	2122.1	.3	101.4	40.6		
	18	MCMA	6	2150	2154	3				
8	100	HIRA	45	0118.5	0118.8	1.5	170.0	50.0	2	
	100	GORK	44	0259 E		421 D		5.0		
	200	GORK	44	0330		390		5.0		
	100	GORK	41	0527	0530.6	15.3	50.0D			
	100	GORK		0527	0538.1		50.0			
	260	ONDR	44	0630	1059.5	523	80.0			
	221	ABST	44	0700	0816.2	240	5.0			
	245	SGMR	44	0910 E	1849.3	904 D	45.8			
	221	ABST	6	0920.8	0921	.5	9.0			
	202	VORO	44	2100	2330	240		10.0		
	3000	RERL	20	1305	1425 U	100 D	13.0U			
	1470	RERL	20	1315	1425 U	70 D	8.9U			
	2800	OTTA	22	1320	1510	750 D	14.8			
	9500	RERL	20	1325	1425 U	60 D	5.3U			
	18	MCMA	6	1538	1539	2				
	2695	BOUL	3	2347.5	2351	5	4.0	1.0	2	
	18	MCMA	41	2356	2359	5			2	
9	200	GORK	44	0300 E		180		5.0		
	260	ONDR	41	0630	0837.5	524	25.0			
	9240	ARCE	20	1439.9	1444.7	77				
	2800	OTTA	67	1458		70	1.2			
	18	MCMA	6	1702	1703	2			1	
	1420	BOUL	45	1831	1834	5.5	3.0	1.0		
	2695	BOUL	3	1832.5	1835	5	3.0	1.0		
	2800	OTTA	1	1833	1834.5	7	2.2	1.0		
	2695	SGMR	1	1833.3	1834.4	2.8	2.6	.8		
	1415	SGMR	2	1833.2	1834.4	2.4	3.0	.9		
	18	MCMA	6	1903	1905	4			1	
	200	HIRA	44	1920 E	0012	870 D	24.0	15.0		
10	100	HIRA	45	0209.6	0210.5	3.5	350.0	70.0		
	100	HIRA	45	0241	0241.2	1	300.0	50.0		
	100	GORK	6	0311.6	0312	1	45.0D			
	100	GORK	41	0338.1	0340.3	8.8	45.0D			
	100	HIRA	45	0339.5	0340.7	2	250.0	80.0		
	1000	TYKW	32	0341	0355	46	-1.5	-0.9		
	3750	TYKW	32	0342	0355	45	3.0	2.0		
	2000	TYKW	32	0342	0355	45	-2.4	-1.5		
	9400	TYKW	32	0344	0400	50	3.0	2.0		
	100	GORK	6	0418.2	0418.3	.5	45.0D			
	200	HIRA	45	0459.3	0459.7	.7	50.0	25.0		
	100	GORK	41	0506.2	0506.7	7.5	45.0D			
	100	GORK		0506.2	0512.8U		45.0D			
	1415	MANI	1	0511.4	0511.8	1.6	1.4	.5		
	606	MANI	1	0511.4	0511.9	1.6	4.0	.9		
	100	HIRA	45	0511.2	0513.2	2.5	1000.0D	300.0D		
	29	UPIC	45	0511	0512.5	3				
	2000	TYKW	1	0512.5	0512.9	1.5	2.0	0.6		
	1000	TYKW	1	0512	0513	3	1.4	0.6		
	200	HIRA	45	0540.5	0541.3	1.5	60.0	30.0		
	260	ONDR	41	0635	0748.5	405	30.0			
	100	GORK	6	0731	0731.1	.4	45.0D			
	100	GORK	6	0922	0922.5	1	45.0			
	200	GORK	41	1116.2	1116.3	2	100.0			
	200	GORK		1116.2	1117.3		100.0			
	2800	OTTA	21	1140	1320	135	1.2	0.9		
	200	GORK	6	1148.1	1148.1	.3	100.0			
	100	GORK	6	1238.3	1238.6	.5	45.0D			
	260	ONDR	44	1320	1326	110	155.0			
	4995	SGMR	20	1322.3	1326.2	12.6	4.7	1.9		
	2695	SGMR	20	1323.1	1327.4	10.6	2.1	.8		
	245	SGMR	7	1324.7	1326.3	4.9	315.0	95.0		
	237	TRST	42	1324.5	1326.2	4.8	850.0			
	113	POTS	45	1324.7	1326.2	4.3	800.0	30.0		
	18	MCMA	8	1324	1326	2				
	3000	RERL	1	1325.7	1326	.8	2.3	1.2	1	
	1470	RERL	2	1325.5	1326	1	2.5	1.0		
	1415	SGMR	1	1325.9	1326.2	.7	3.7	1.5		
	930	RORD	45	1325	1326.2	2	14.0	2.0		
	606	SGMR	2	1325.4	1326.3	1.2	6.4	2.6		
	536	ONDR	45	1325	1326	2	135.0			

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	410 SGMR	6	1325.5	1326.2	4.1	28.9	8.7		
	2800 OTTA	8	1326	1326.2	.5	1.8	0.9		
	234 POTS	45	1326	1326.2	.5	930.0	100.0		
	536 ONDR	8	1348.5	1348.5	.5	40.0			
	237 TRST	45	1348.7	1348.7	.2	120.0	30.0		
	18 MCMA	41	1404	1406	6			1	
	536 ONDR	45	1405.5	1410	5.5	45.0			
	245 SGMR	48	1407	1410.2	4	501.0	200.0		
	237 TRST	42	1407.1	1408.8	3.2	160.0			
	237 TRST		1407.1	1410.1		520.0			
	113 POTS	40	1407.1	1408.9	3.2	350.0	35.0		
	606 SGMR	4	1408.5	1409.9	3.2	34.6	10.4		
	410 SGMR	6	1408	1409.8	4	14.8	4.4		
	3000 BERL	1	1409.5	1410	1.5	1.7			
	1470 BERL	2	1409	1409.5	1.5	2.5	0.7		
	930 BORD	45	1409	1410	2	100.0	2.0		
	237 TRST	41	1432.6	1433.2	.8	140.0			
	113 POTS	45	1432.6	1432.7	.2	100.0	8.0		
	2800 OTTA	27	1445		235	1.8	1.6		
	2800 OTTA	24	1445	1525	40	1.8	0.9		
	113 POTS	40	1450.6	1450.8	.3	280.0	14.0		
	2800 OTTA	24	1525		175	1.8			
	237 TRST	41	1530.4	1530.5	.2	87.0			
	2695 SGMR	21	1650.2	1747.6	96.7	7.1	3.6		
	1415 SGMR	21	1651.9	1750.2	97.8	6.7	3.4		
	4995 SGMR	21	1705.5	1750.7	75.3	6.1	3.1		
	606 SGMR	21	1709.7	1747.5	80.9	3.7	1.9		
	18 MCMA	6	1713	1714	2			1	
	2800 OTTA	21	1715	1740	60	2.8	1.6		
	8800 SGMR	21	1718.3	1720.6	65.7	12.3	6.2		
	7000 SAOP	27	1737.9		1	4.5	4.5		
	18 MCMA	6	1741	1744	4			2	
	8800 SGMR	3	1742.8	1742.9	2.2	10.7	3.2		
	4995 SGMR	2	1742.8	1743.5	2.4	9.4	3.8		
	4995 BOUL	8	1742	1743.5	3	11.0	5.0		
	2800 OTTA	3	1742.8	1743.5	1.5	11.2	3.8		
	2695 SGMR	4	1742.8	1743.5	2.4	10.2	3.1		
	1420 BOUL	8	1742	1743.5	4	6.0	2.0		
	1415 SGMR	4	1742.8	1743.6	4.2	10.6	3.2		
	606 SGMR	2	1742.7	1745	2.8	6.7	2.7		
	410 SGMR	6	1742.7	1743	1.3	75.2	22.6		
	245 SGMR	6	1742.6	1743	2.2	173.0	51.9		
	2695 BOUL	8	1743	1744.5	4.5	11.0	4.0		
	2800 OTTA	26	1820	1840	20	-1.8	-0.9		
	2695 PENT	24	2005	2015	10	1.0	0.5		
	2800 OTTA	24	2015		135	1.0			
	245 SGMR	6	2026.5	2027	.9	18.9	5.7		
	2800 OTTA	20	2100	2120	40	1.4	0.7		
	245 SGMR	43	2111.5	2218.8	183.5D	50.6			
	2695 PENT	24	2230	2325	55	1.8	0.9		
	2695 PENT	24	2325		140 D	1.8			
11	100 GORK	44	0257 E		513 D		5.0		
	100 HIRA	45	0345	0353.2	13	900.0	160.0		
	200 GORK	44	0409		207 D		5.0		
	100 GORK	6	0418.3	0418.5	.7	40.0D			
	100 GORK	6	0500	0500.3	.5D	40.0D			
	260 ONDR	44	0638	1017	522	55.0			
	315 DWIN	44	0820	1107	267		27.0		
	234 POTS	45	0904	0904.1	.4	250.0	15.0		
	200 GORK	44	0906		114		40.0		
	245 SGMR	44	0910 E	2221	906 D	136.0			
	200 GORK	44	1100		114		5.0		
	410 SGMR	43	1822.1	1924.5	353.9D	51.3			
	606 SGMR	43	1834.5	2034.7	341.5D	23.4			
	200 HIRA	44	1920 E	2353	870 D	110.0	45.0		
	18 MCMA	42	2154	2159	81			2	
	202 VORO	44	2232	2354	148		54.0		
	6100 KISV	40	0816	0817.2	4	4.0			
	9500 BERL	22	1116.5	1117 U	24	6.9	2.8		
	3100 CRIM	1	1116	1118	5	4.0	1.0		
	3000 BERL	2	1116	1117.1	24	4.0	1.2		
	2800 OTTA	1	1116.2	1117.2	1.5	3.0	1.5		
	1470 BERL	2	1116	1117	24	2.2	0.7		
	930 BORD	45	1116	1118.2	2	9.0	2.0		
	2800 OTTA	29	1118	1118	27	1.6	0.8		
	536 ONDR	8	1127.5	1127.5	.5	35.0			
	536 ONDR	41	1303	1305.5	137	40.0			
	2800 OTTA	1	1530.5	1531.5	1.5	.6	0.3		
	2800 OTTA	20	1600	1655	150	2.2	1.1		
	18 MCMA	42	1600	1604	5			1	
	18 MCMA	6	1635	1643	7			2	
	930 BORD	45	1750	1751.1	2	12.0	2.0		
	930 BORD	40	1803	1803.6	3	18.0	2.0		
	18 MCMA	41	2328	2335	7			3	
12	200 GORK	44	0300 E		420 D		5.0		
	100 GORK	44	0300 E		600 D		10.0		
	200 GORK	6	0407.9	0408.6	1.5	300.0	150.0		
	100 GORK	6	0435.2	0436.2	2	500.0			

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	200	GORK	41	0446	0446.7	7.4	150.0			
	200	GORK		0446	0449.2		400.0			
	200	GORK		0446	0452.7		150.0			
	200	GORK	41	0508.1	0508.6	7.7	250.0			
	200	GORK		0508.1	0515.6		300.0			
	200	GORK	6	0525.3	0525.8	1	200.0	100.0		
	260	ONDR	44	0638	0711	112	115.0			
	536	ONDR	41	0700	1009.5	260	40.0			
	207	IZMI	43	0700	0744.3	240	55.0			
	260	ONDR	44	0830	1009	380	45.0			
	100	GORK	41	0833	0833.1	16.2	50.0			
	100	GORK		0833	0835.5		50.0			
	245	SGMR	44	0910 E	2339.3	906 D	16.1			
	200	GORK	6	0910.9	0911.3	.8	300.0	150.0		
	315	DWIN	44	0936	1514	349		36.0		
	200	GORK	41	0949	0949.2	1.8	200.0			
	200	GORK		0949	0950.3		200.0			
	100	GORK	6	1047.2	1047.7	1	50.0			
	100	GORK	6	1112.2	1112.6	.6	50.0			
	9100	GORK	2	1146	1147.5	3.2	9.7	4.8		
	100	GORK	41	1215.5	1215.8	17.3	50.0			
	100	GORK		1215.5	1219.3		50.0			
	410	SGMR	43	1401.2	1540.1	148.8	9.6			
	113	POTS	45	1418 U	1437.5U	22	200.0	7.0		
	260	ONDR	44	1450	1502.5	20	55.0			
	18	BOUL	6	1506	1509	3			1	
	18	MCMA	6	1606	1609	4			3	
	410	SGMR	43	1831.6	2014	344.4D	39.4			
	606	SGMR	43	1835.9	2012.6	340.1D	20.0			
	200	HIRA	44	1920 E	0542	870 D	110.0	30.0		
	1420	BOUL	40	1932.5	1955	27.5	3.0	1.0		
	18	MCMA	42	2052	2105	50			3	
	202	VORO	44	2100	0100	240		12.0		
	2695	PENT	20	2300	2350	80	1.2	0.6		
13	2695	PENT	1	0115	0115.5	1	1.2	0.6		
	2695	PENT	1	0135.8	0136	1	1.2	0.6		
	200	GORK	44	0300 E		60		5.0		
	100	GORK	44	0300 E		94		5.0		
	100	GORK	44	0333		312		15.0		
	100	HIRA	43	0348	0548	164	30.0	10.0		
	200	GORK	44	0400		300		50.0		
	234	POTS	45	0618.2U	0618.8U	.7	350.0	35.0		
	260	ONDR	44	0640	1313	520	105.0			
	221	ABST	44	0700	0804.2	240	14.0			
	207	IZMI	43	0700	0740	300	60.0			
	221	ABST	48	0814.2	0814.8	1.5	25.0	8.0		
	221	ABST	48	0829.5	0830.2	1	26.0	8.0		
	100	GORK	44	0845		246 D		5.0		
	200	GORK	44	0900		230 D		5.0		
	245	SGMR	44	0910 E	2212.5	907 D	163.5			
	536	ONDR	45	0945.5	0953.5	17	35.0			
	536	ONDR	45	1002	1013.5	28	40.0			
	408	TRST	44	1002	1011.4	33	38.0			
	221	ABST	49	1008.5	1011.8	7.8	26.0	8.0		
	228	HARS	45	1045	1047	12	1000.0D			
	228	HARS	45	1104.5	1107	5	1000.0D			
	536	ONDR	45	1236.5	1309.5	55	40.0			
	410	SGMR	43	1236.3	1518.2	268.7	15.2			
	200	HIRA	43	2040	2225	320	70.0	30.0		
	202	VORO	44	2100	2150	240		30.0		
	100	HIRA	43	2132	2307	185	90.0	25.0		
	500	HIRA	27	2210	2241	57	10.0	2.0		
	4995	BOUL	3	1418.5	1421	14.5	11.0	3.0		
	2695	BOUL	21	1419	1422.5	26	22.0	6.0		
	606	SGMR	22	1512.1	1542.9	24.4	8.6	5.1		
	1415	SGMR	1	1528.9	1533	8.6	5.3	2.1		
	1420	BOUL	8	1532	1533	3.5	5.0	2.0		
	2800	OTTA	20	2025	2035	55	1.4	0.7		
14	200	GORK	44	0303 F		600 D		5.0		
	100	GORK	44	0303 F		180		5.0		
	100	GORK	44	0600		90		10.0		
	260	ONDR	41	0631	1402	519	45.0			
	3100	CRIM	20	0650	0752	70	3.0	1.0		
	550	KIEV	42	0654.5	0727.9	42	73.0			
	100	GORK	44	0730		260		5.0		
	245	SGMR	44	0910 E	2342.3	907 D	162.3			
	100	GORK	44	1200		70		10.0		
	202	VORO	44	2100	2228	240		15.0		
	8800	SGMR	20	1418.8	1430.4	26.2	12.9	6.5		
	4995	SGMR	20	1418.7	1421.5	28.9	5.5	2.8		
	3000	BERL	4	1418	1421	37	26.0	4.6		
	2695	SGMR	21	1418.7	1422.8	28.3	7.8	3.9		
	2695	ATHN	3	1418.9	1421.2	3.5	20.0	5.1		
	1470	BERL	4	1418.5	1420.5	27	10.0	1.7		
	1420	BOUL	3	1418	1420.5	6.5	7.0	3.0		
	1415	SGMR	21	1418.4	1422.1	15.1	4.4	2.2		
	9500	BERL	22	1419	1421.7	19	11.0			
	8800	ATHN	1	1419.3	1422	6.8	8.1	3.0		

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	4995	ATHN	3	1419.2	1421.5	5.3	10.1	3.4		
	2800	OTTA	3	1419	1421.3	3.5	19.4	11.0		
	2695	SGMR	3	1419.2	1421.1	3.1	17.4	5.2		
	1415	SGMR	2	1419.2	1421.3	2.6	6.0	2.4		
	1415	ATHN	1	1419.2	1421.3	3.6	6.8	1.9		
	9240	ARCE	20	1420.2	1423.1	47				
	2800	OTTA	8	1421.2	1421.2		5.8			
	2695	PENT		1421.2	1421.2	3.5				
	2800	OTTA	29	1422.5	1422.5	43	7.8	3.4		NULL
	18	MCMA	41	1559	1600	4			1	
	2800	OTTA	20	1615	1616.5	19	1.2	0.6		
	18	MCMA	6	1742	1744	2			1	
	245	SGMR	6	1934.5	1936	2.3	37.1	11.1		
	245	SGMR	6	2039.2	2040.2	2.7	49.4	14.8		
15	200	GORK	44	0300 E		126				
	100	GORK	44	0300 E		396 D		5.0		
	100	HIRA	45	0407	0407.3	1	1000.0D	5.0		
	100	GORK	6	0515	0515.4	1.1	25.0D	400.0D		
	200	GORK	44	0539		237 D		35.0		
	29	UPIC	45	0539.5	0540	1.5				
	100	GORK	6	0639	0642.2	4.2	25.0D			
	260	ONDR	44	0645	0945	525	100.0			
	221	ABST	44	0700	0701.8	240	13.0	8.0		
	207	IZMI	6	0739	0739	.8	180.0	80.0		
	207	IZMI	6	0800.8	0800.8	1	180.0	80.0		
	245	SGMR	44	0910 E	1108.9	908 D	38.2			
	221	ABST	6	1042.5	1043	.5	24.0			
	18	MCMA	6	1529	1530	2			1	
	18	BOUL	6	1752	1757	7			1	
	18	BOUL	41	2303	2307	8			1	
16	200	HIRA	45	0133.5	0134 U	1	180.0L	90.0D		
	100	HIRA	45	0204.5	0205.2	1	90.0	30.0		
	1000	TYKW	45	0210	0252.8	155	13.0	3.0		
	200	GORK	44	0303 E		60 U		5.0		
	100	GORK	44	0306		234		5.0		
	100	GORK	6	0319.5	0319.8	.9	250.0D			
	2000	TYKW	45	0342	0343.3	10	2.4	0.5		
	200	GORK	6	0409.3	0409.8	.8	250.0D			
	260	ONDR	44	0600	0707.5	492	50.0			
	207	IZMI	43	0700	1119	300	40.0			
	100	GORK	44	0700		180 D				
	234	POTS		0707.4	0707.6	.3	45 250.0	10.0		
	207	IZMI	6	0707.4	0707.5	.6	320.0	50.0		
	100	HIRA	45	0707.5	0707.6	1	290.0	140.0		
	100	GORK	41	0839.4	0840.3	9.3	100.0	90.0		
	100	GORK		0839.4	0845.8		100.0			
	100	GORK		0839.4	0848.3		100.0			
	245	SGMR	44	0910 E	1524.6	908 D	51.9			
	100	GORK	41	0916.3	0916.8	9.7	150.0			
	100	GORK		0916.3	0920		200.0			
	100	GORK		0916.3	0926		100.0			
	100	GORK	6	0940.9	0941.2	.9	100.0	25.0		
	228	HARS	5	1312	1312.5	1	150.0	10.0		
	200	HIRA	44	1920 E	0606	870 D	50.0	20.0		
	202	VORO	44	2100		240		10.0		
	2695	BOUL	3	2352.5	2353.5	4	3.0	1.0		
	100	HIRA	45	2353	2353.3	1	110.0	50.0		
17	100	GORK	44	0302 E		598 D		35.0		
	260	ONDR	44	0630	0833.5	520	60.0			
	221	ABST	44	0700	0716.2	180	5.0			
	200	GORK	44	0700		360		5.0		
	221	ABST	48	0826	0826.2	.8	19.0	6.0		
	245	SGMR	44	0910 E	1010.6	909 D	21.4			
	200	HIRA	44	1920 E	2310	870 D	22.0	14.0		
	100	HIRA	44	1920 E	2118	375 D	40.0	10.0		
	3750	TYKW	45	0432	0436	6	3.0	1.0		
	2000	TYKW	45	0432	0436	6	3.0	1.0		
	1000	TYKW	45	0432	0436.5	6	2.2	0.6		
	8800	ATHN	1	0435.5	0436.4	6.2	3.7	1.1		
	4995	ATHN	1	0435.5	0436.2	4.7	3.2	1.1		
	2695	ATHN	1	0435.3	0436.2	2.5	5.2	1.6		
	1415	ATHN	1	0435.3	0436.2	2.1	.9	.3		
	228	HARS	45	0435	0435.5	2	240.0	65.0		
	200	HIRA	45	0435	0436 U	2	180.0D	60.0D		
	100	HIRA	45	0436	0436.2	1	150.0	40.0		
	650	GORK	1	0453.8	0455.5	2.8	4.2	1.9		
	1000	TYKW	1	0454	0455.6	5	2.2	0.6		
	2000	TYKW	20	0500	0542	90	2.5	0.8		
	1000	TYKW	45	0500	0534	90	16.0	3.0		
	950	GORK	40	0504.3	0529.9	38.2	7.9			
	650	GORK	22	0515.7	0526	24	7.7	3.0		
	100	HIRA	43	0521	0815.5	264 D	50.0	10.0		
	100	GORK	6	0954.1	0954.3	1.5	250.0D			
	100	GORK	41	1013.5	1014.1	2.5	250.0D			
	100	GORK		1013.5	1015		200.0			
	2800	OTTA	8	1349.5	1349.8	.5	2.4	0.8		
	2800	OTTA	2	1726	1727	2	1.8	0.9		

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	2695	PENT		1726	1727	2				
	1420	BOUL	8	1845.5	1846.5	1.5	23.0	9.0		NULL
	8800	SGMR	4	1846.2	1846.8	.8	19.6	5.9		
	4995	SGMR	4	1846.1	1846.7	1.6	17.5	5.3		
	2800	OTTA	1	1846.5	1846.7	1	5.2	1.8		
	2695	SGMR	1	1846.4	1846.7	.9	3.1	.9		
	1415	SGMR	4	1846.3	1846.5	.9	15.8	4.7		
	930	BORD	45	1846	1846.6	1	10.0	3.0		
	606	SGMR	4	1846.4	1846.5	.8	32.2	9.7		
	410	SGMR	6	1846	1846.5	1.3	27.4	8.2		
	245	SGMR	6	1846.2	1846.8	1.2	107.9	32.4		
	7000	SAOP	8	1847.5	1847.7	.5	19.3			
	2695	BOUL	8	1847	1847.5	1	6.0	2.0		
	18	MCMA	6	1847	1849	4			2	
18	4995	MANI	1	0120.9	0121.3	2.2	7.1	2.7		
	1415	MANI	40	0120.9	0121.2	1.4	17.1	3.9		
	606	MANI	4	0120.9	0121.3	2.3	20.2	5.6		
	9400	TYKW	1	0121	0121.3	1	4.0	1.0		
	9300	IRKU	1	0121.8	0122	.5	9.0			
	8800	MANI	1	0121	0121.3	.7	7.0	1.7		
	3750	TYKW	1	0121	0121.3	1	3.0	1.0		
	2695	PENT	8	0121	0121.3	.6	8.6	2.2		
	2695	MANI	4	0121	0121.5	1.3	12.5	1.9		
	2000	TYKW	45	0121	0121.4	2	18.0	3.0		
	1000	TYKW	1	0121	0121.3	1	14.0	3.0		
	200	HIRA	45	0121	0121.4	1.5	180.0D	90.0D		
	100	HIRA	45	0121	0121.5	1.5	1000.0D	200.0D		
	100	GORK	44	0300		600 D		10.0		
	260	ONDR	44	0639	0852	511	55.0			
	245	SGMR	44	0910 E	1444.5	909 D	78.1			
	1000	TYKW	45	0452	0453.2	1.5	2.4	1.0		
	6100	KISV	45	0702	0704	6	3.0			
	3000	BERL	1	0703	0703.8	1	1.7			
	2000	TYKW	45	0703	0703.7	2	2.4	0.7		
	1470	BERL	4	0703	0703.5	1.2	4.2	1.6		
	1415	MANI	2	0703.3	0703.7	1.2	5.8	1.9		
	1000	TYKW	45	0703	0703.7	1.5	2.9	1.0		
	606	MANI	2	0703.4	0703.8	1.1	5.9	1.5		
	237	TRST	42	0703.5	0704.2	3.1	68.0			
	100	HIRA	45	0703.7	0703.8	1	95.0	40.0		
	6100	KISV	45	0851.5	0852.5	16	5.0			
	3000	BERL	46	0851.5	0852	2.9	4.6	2.4		
	1470	BERL	46	0851.7	0852	2.8	5.1	1.6		
	3100	CRIM	1	0852	0853	4	3.0	1.0		
	950	GORK	41	0852.5	0852.7	1.5	3.0	1.5		
	950	GORK		0852.5	0853.7		4.7	2.0		
	650	GORK	41	0852.5	0852.6	2.5	5.5			
	650	GORK		0852.5	0853.8		8.3			
	650	GORK		0852.5	0854.4		7.4			
	550	KIEV	41	0852.2	0856.9	7.5	77.0			
	536	ONDR	45	0852	0856.5	11	90.0			
	510	POTS	41	0852 U	0856.3U	7.2U	77.0	1.0		
	237	TRST	41	0852.3	0852.5	1.3	130.0			
	234	POTS	41	0852.4	0852.5	7.6D	100.0			
	207	IZMI	41	0852	0855	11.3	240.0	140.0		
	113	POTS	41	0852.4	0852.5	7.7D	200.0			
	100	GORK	41	0852.5	0853.7	8	200.0			
	100	GORK		0852.5	0900.2		300.0			
	3000	BERL	1	0855.5	0856.9	3.3	2.4			
	1470	BERL	1	0856	0856.8	3	1.3			
	650	GORK	3	0856.7	0857.3	.6	18.0	5.0		
	228	HARS	5	1537.5	1538	1	110.0	30.0		
	410	SGMR	6	2219.4	2220.1	1.2	19.6	5.9		
	245	SGMR	6	2219.5	2220.2	1.7	22.3	6.7		
	1415	SGMR	1	2220.2	2220.5	.7	2.8	.8		
	606	SGMR	3	2220	2220.5	.9	18.9	5.7		
	100	HIRA	45	2357	U	6	900.0U	200.0U		
19	100	HIRA	45	0004	0004.5	1.5	400.0	100.0		
	100	GORK	44	0254 E		117		5.0		
	100	GORK	6	0314.5	0314.7	.4	65.0D			
	245	SGMR	6	1436.9	1437.4	4.6	8.1	2.4		
	606	SGMR	40	1603.4	1604.6	1.6	11.9	3.5		
	410	SGMR	6	1604.7	1604.8	.5	11.8	3.5		
	245	SGMR	6	1604.7	1604.7	1.4	18.2	5.4		
	2800	OTTA	23	2100	2243	175 D	10.0			
	2000	TYKW	45	2205	2242.6	160	7.0	2.0		
	1000	TYKW	45	2205	2241.8	130	19.0	4.0		
	200	HIRA	27	2205	2321	155	40.0	30.0		
	3750	TYKW	45	2210	2304	170	6.0	2.0		
	2800	OTTA	1	2213	2213.5	2	1.8	0.9		
	2800	OTTA	8	2214	2214		2.0			
	2800	OTTA	1	2220	2220.5	1	1.0	0.5		
	202	VORO	24	2232	2351	148				
	1415	SGMR	22	2234	2300.6	105 D	7.0	4.2		
	606	SGMR	22	2234.5	2300.2	104.5D	42.9	25.8		
	410	SGMR	6	2234	2252	105 D	45.5	13.7		
	100	HIRA	27	2234	2358	120	30.0	10.0		
	9400	TYKW	20	2235	2310	120	4.0	2.0		

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	500 HIRA	27	2235	2300.2	40	35.0	10.0		
	245 SGMR	6	2239.9	2313.3	99.1D	54.5	16.3		
	100 HIRA	45	2249.2	2253.3	5.5	90.0	30.0		
	2800 OTTA	20	2258	2300	14	3.4	1.6		
	18 MCMA	6	2313	2315	4			2	
	18 BOUL	6	2313	2315	6			1	
20	100 GORK	44	0303 E		597 D		10.0		
	100 HIRA	45	0313.5	0314	1	110.0	40.0		
	3100 CRIM	24	0824	0930		2.0			
	930 BORD	45	1530	1530.4	1	9.0	2.0		
21	260 ONDR	6	0737.5	0737.5	.5	20.0			
	9240 ARCE	23	1227.9	1241.2	37				
	9240 ARCE	4	1227.5	1229.6	3.6				
	1470 BERL	1	1410	1410.1	1.5	7.0	2.8		
	3000 BERL	20	1417.5	1440	39	4.1			
	9500 BERL	20	1418.5	1438.8	34	5.4			
	2800 OTTA	22	1422	1440	70	2.8	1.4		
	260 ONDR	45	1433.5	1434	2	15.0			
	1470 BERL	4	1434	1435.3	11	10.0	1.7		
	1420 BOUL	8	1434	1435.5	3.5	15.0	6.0		
	930 BORD	45	1434	1434.8	2	16.0	3.0		
	536 ONDR	45	1434.5	1435	5.5	30.0			
	410 SGMR	6	1434.3	1435.3	1.7	12.2	3.6		
	1415 SGMR	2	1435	1435.7	2.2	9.0	3.6		
	808 ONDR	45	1435.5	1435.5	4.5	65.0			
	606 SGMR	2	1435.2	1435.6	4	5.9	2.3		
	8800 SGMR	22	1757	1901.3	118.3	13.2	7.9		
	2800 OTTA	21	1802	1920	250	8.4	5.0		
	2695 SGMR	22	1804.9	1825	172.8	10.4	3.1		
	1415 SGMR	22	1804.2	1823.5	173.6	7.2	2.2		
	606 SGMR	41	1805.7	1830.8	108.8	11.2	3.4		
	410 SGMR	6	1811.3	1815.2	29.2	21.8	6.6		
	1420 BOUL	45	1812.5	1823.5	28.5	5.0	1.0		
	245 SGMR	6	1812.4	1824	30.1	6.2	1.8		
	2800 OTTA	22	1813	1825	30	5.6	2.8		
	4995 SGMR	22	1814.5	1903.3	116	8.2	2.4		
	2695 BOUL	45	1814.5	1825	16.5	5.0	2.0		
	2800 OTTA	8	1821	1821		652.0			
	2695 PENT		1821	1821					
	1420 BOUL	3	1850.5	1855	8	3.0	1.0		NULL
	2695 BOUL	3	1852.5	1855.5	6	3.0	1.0		
	2800 OTTA	1	1853	1855	5	1.8	0.9		
	18 BOUL	41	1906	1912	7				
	1420 BOUL	3	2302	2303	2	2.0	1.0	1	
22	3750 TYKW	1	0107	0110.3	10	5.0	1.0		
	3750 TYKW	1	0317	0319	7	2.0	0.5		
	3750 TYKW	20	0337	0341.3	15	18.0	4.0		
	2000 TYKW	1	0337	0341.4	8	2.5	0.4		
	4995 MANI	1	0341	0341.3	1.5	7.4	3.7		
	2695 MANI	4	0341	0341.5	1.5	11.5	4.4		
	100 GORK	6	0542.5	0543.7	1.6	5.0			
	2800 OTTA	20	1552	1555	16	.8	0.4		
	2800 OTTA	22	1716	1720	24	1.6	0.8		
	2800 OTTA	20	1845	1857	25	1.0	0.5		
23	3750 TYKW	20	0440	0544.5	160	28.0	7.0		
	9600 TYKW	20	0450	0552	180	32.0	11.0		
	2000 TYKW	45	0450	0544.2	150	31.0	4.0		
	4995 ATHN	1	0514.8	0515.8	2.3	5.5	1.7		
	3750 TYKW	1	0514	0515.6	10	12.0	3.0		
	2695 ATHN	1	0514.8	0515.8	3.8	4.3	1.3		
	8800 ATHN	1	0515.5	0516	2	3.6	1.1		
	4995 MANI	2	0515.1	0515.7	2.1	7.6	1.5		
	2695 MANI	2	0515.1	0515.5	2.1	9.7	1.9		
	1000 TYKW	45	0540	0544.6	20	61.0	3.0		
	8800 MANI	22	0541.5	0548	15.8	17.3	3.5		
	4995 MANI	22	0541.5	0544.6	27	15.2	2.3		
	2695 MANI	4	0541.5	0544.4	8.5	34.9	4.9		
	1415 MANI	40	0541.5	0544.6	12.5	37.6	2.4		
	8800 ATHN	20	0542.7	0552.6	22.5	15.0	8.7		
	4995 ATHN	22	0542	0548	12.3	8.8	5.3		
	2695 ATHN	22	0542	0544.3	21.5	19.0	12.0		
	950 GORK	45	0542	0543.2	3.6	5.0			
	950 GORK		0542	0544.8		80.0			
	606 MANI	2	0542	0544.5	7.1	6.6	1.0		
	100 GORK	41	0549.1	0553	18.7	50.0D			
	100 GORK		0549.1	0556.1		50.0D			
	100 GORK		0549.1	0558.5		50.0D			
	29 UPIC	45	0559.5	0602	3.5				
	9100 GORK		0618		42 U				
	100 HIRA	45	0730.3	0732	3.5	800.0	70.0		
	100 HIRA	45	0742	0743.2	2.5	100.0	40.0		
	100 HIRA	45	0821	0821.6	1.2	300.0	100.0		
	100 HIRA	45	0839.5	0840	3.5	800.0	90.0		
24	18 MCMA	6	1442	1444	2				
	2800 OTTA	21	1506	1508	24	1.6	0.8	1	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1974

1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	REMARKS
	2800	OTTA	8	1507.3	1507.3		1.4			
	2800	OTTA	8	1508.5	1508.5		3.4			
	100	HIRA	45	1949	1949.8	2	90.0	30.0		
25	9240	ARCE	20	1251	1253.3	7				
	930	BORD	45	1514	1514.2	1	12.0	2.0		
	930	BORD	45	1536	1536.4	1	10.0	2.0		
	930	BORD	45	1544	1544.8	1	9.0	2.0		
	930	BORD	45	1641	1641.2	1	12.0	2.0		
	2695	SGMR	1	1717.2	1717.4	.5	2.6	.8		
	1415	SGMR	1	1717.2	1717.4	1.4	3.0	.9		
	606	SGMR	1	1717.2	1717.6	1.3	5.4	1.6		
	410	SGMR	6	1717	1718.2	1.6	3.3	1.0		
	245	SGMR	6	1717.2	1718.5	3	1.6	.5		
	930	BORD	45	1751	1751.9	1	13.0	2.0		
26	930	BORD	40	1434	1434.8	1	8.0	2.0		
	18	MCMA	6	1657	1657	3			1	
	245	BOUL	42	2203	2221	20			2	
27	260	ONDR	41	1309	1500	126	20.0			
	29	UPIC	45	1420	1420.5	1.5				
	29	UPIC	45	1458	1458.5	1.5				
28	245	BOUL	42	0011	0031	21				
	2695	PENT	24	0030	0140	70	2.6	1.3	1	
	245	BOUL	42	0055	0108	30				
	1420	BOUL	3	0134.5	0135	1	1.0		2	
	2695	BOUL	3	0136	0136.5	1	4.0	1.0		
	2695	PENT	24	0140		10 D	2.6			
	245	BOUL	42	0212	0217	15				
	100	GORK	6	1110.5	1111	.8	20.0	10.0	2	
	100	GORK	6	1229	1229.2	.3	15.0			
	18	MCMA	6	1432	1433	2				
	18	MCMA	6	1438	1440	5			1	
	29	UPIC	45	1439	1439.5	1			2	
	18	MCMA	6	1529	1530	2				
	18	MCMA	41	2054	2055	3			1	
29	2695	BOUL	8	0018.5	0019	1.5	8.0	3.0	1	
	100	GORK	6	0342.2	0342.3	.3	100.0	50.0		
	100	GORK	6	0359.1	0359.2	.2	100.0	50.0		
	100	GORK	6	0624.8	0626	2.1	20.0	10.0		
	100	GORK	44	0748		60		5.0		
	200	GORK	6	0800.2	0800.4	1 D	250.0D			
	100	GORK	41	0820	0820.1	1	60.0			
	100	GORK		0820	0820.8		130.0			
	950	GORK	1	0825.8	0826	.3	3.0	1.5		
	650	GORK	1	0825.7	0825.8	.7	5.6	2.8		
	100	GORK	6	0940.6	0940.7	.2	45.0	20.0		
	2800	OTTA	22	1040 F	1110	50 D	4.0			
	2800	OTTA	20	1135	1207	90	3.8	1.9		
	7000	SAOP	20	1150.3		44.3	9.8			
	408	TRST	41	1230.2	1230.4	.5	32.0			
	18	MCMA	41	1343	1345	2				
	2800	OTTA	24	1410	1522	72	3.0	1.2	1	
	2800	OTTA	21	1434	1459	48	1.6	0.8		
	1415	SGMR	2	1458.9	1501.6	3.9	2.2	.7		
	2800	OTTA	2	1459.7	1501.5	3	2.8	1.3		
	2695	BOUL	3	1459	1502.5	5.5	5.0	2.0		
	2695	SGMR	2	1459.2	1501.9	4.1	2.9	.9		
	29	UPIC	45	1500.5	1503	3				
	18	MCMA	6	1500	1503	6				
	4995	SGMR	2	1501	1501.7	1.1	1.0	.3	3	
	1420	BOUL	3	1501	1501.5	1	2.0	1.0		
	2800	OTTA	24	1522		460 D	3.0			
	1415	SGMR	2	1526.9	1528.2	2.4	4.4	1.8		
	18	BOUL	6	1526	1529	3				
	8800	SGMR	2	1527.6	1528	.8	6.4	2.5	1	
	4995	SGMR	2	1527	1528.1	2.1	9.9	3.9		
	2800	OTTA	4	1527	1528	3	12.0	3.0		
	2700	PENN	3	1527.3	1528.2	6.6	13.3	1.6		
	2695	SGMR	4	1527.3	1528.2	3	11.9	3.6		
	1420	BOUL	3	1527.5	1529	2	4.0	1.0		
	1420	BOUL	3	1527.5	1528	1	10.0	3.0		
	245	SGMR	6	1527.6	1528.2	1.4	13.8	4.1		
	29	UPIC	45	1527	1528.5	2.5				
	18	MCMA	6	1527	1530	3				
	2695	BOUL	8	1528.5	1530	3	11.0	3.0	3	
	606	SGMR	2	1528.2	1528.6	1.1	3.6	1.4		
	410	SGMR	6	1528	1528.4	.8	10.3	3.1		
	2800	OTTA	8	1531.2	1531.4	.5	2.2	1.1		
	2800	OTTA	20	1534	1600	118	4.0	2.0		
	18	MCMA	6	1733	1735	2				
	2800	OTTA	22	1935		110	2.6	1.3	1	
	606	SGMR	2	1953.6	1955.6	2.9	5.5	2.2		
	410	SGMR	6	1953.5	1955.7	3.5	64.6	19.4		
	1415	SGMR	2	1954.7	1955.1	3.1	5.0	2.0		
	245	SGMR	6	1954.9	1955.4	1.2	2.7	1.6		
	2800	OTTA	1	2143	2143.2	1	1.6	0.8		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

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JUN 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	2800	OTTA	20	2240	2300	25 D	2.4			
30	1415	MANI	3	0227.6	0230.4	9.9	18.9	6.6		
	1000	TYKW	45	0227	0230.3	10	14.0	5.0		
	606	MANI	4	0227.1	0228.7	7.1	78.0	15.0		
	8800	MANI	1	0228	0230.5	8.2	8.7	3.5		
	4995	MANI	3	0228	0230.3	8.2	15.4	6.4		
	3750	TYKW	1	0228	0230	7	18.0	8.0		
	2695	MANI	3	0228	0230.4	8.2	25.2	8.4		
	2000	TYKW	3	0228	0230.4	12	23.0	6.0		
	500	HIRA	5	0228	0229	3	50.0	20.0		
	3750	TYKW	29	0235		35	3.0	1.0		
	100	GORK	6	0420.9	0421.1	1	50.0	25.0		
	606	MANI	2	0524.5	0527.2	4	5.0	2.0		
	100	GORK	6	0546.6	0547.2	1.2	40.0	20.0		
	6100	KISV	47	0704	0707.5	11	57.0			
	8800	MANI	3	0705.7	0707.5	6.5	46.6	13.8		
	4995	MANI	4	0705.4	0707.5	8.1	54.0	27.2		
	3750	TYKW	45	0705	0707.3	8	22.0	8.0		
	3000	BERL	46	0705	0707.2	48	24.0	5.4		
	2695	MANI	4	0705.4	0707.3	6.8	16.8	5.9		
	1470	BERL	46	0705	0711.4	25	18.0	2.0		
	9500	BERL	4	0706	0707.3	36	39.0	7.1		
	9400	TYKW	45	0706	0707.3	7	45.0	17.0		
	9100	GORK	4	0706	0707	36	43.0	12.9		
	8800	ATHN	4	0706.8	0707.4	3.8	46.0	14.0		
	4995	ATHN	4	0706.8	0707.4	4.9	36.0	11.0		
	2695	ATHN	46	0706.8	0707.4	7	22.7	4.5		
	2000	TYKW	45	0706	0710.9	11	33.0	4.0		
	1415	MANI	4	0706.8	0710.8	11.6	17.6	8.8		
	1000	TYKW	45	0706	0711	8	35.0	3.0		
	950	GORK	46	0706.5	0707.3	6	34.0			
	950	GORK		0706.5	0711.1		107.0			
	808	ONDR	45	0706.5	0711	7.5	220.0			
	650	GORK	40	0706.6	0707.4	12.3	180.0D			
	650	GORK		0706.6	0711.1		110.0			
	606	MANI	4	0706.6	0707.5	10.1	225.0	96.0		
	9300	IRKU	3	0707	0707.6	8	54.0			
	1415	ATHN	46	0707.2	0710.9	7.5	16.2	3.2		
	550	KIEV	6	0707.1	0710.8	8.2	102.0			
	536	ONDR	45	0707	0711	8	115.0			
	260	ONDR	45	0707	0714	18	15.0			
	100	GORK	6	0707.2	0707.7	1.3	60.0	30.0		
	510	POTS	45	0708 U	0711.5U	7 U	140.0	28.0		
	500	HIRA	5	0709	0710.8	6	110.0	35.0		
	9100	GORK	29	0712	0716	30	11.8	6.8		
	100	GORK	44	0712		63		5.0		
	9400	TYKW	29	0713		30	10.0	4.0		
	3750	TYKW	29	0713		30	4.0	2.0		
	260	ONDR	45	0752.5	0754	4.5	20.0			
	113	POTS		0752.6	0754	1.6	200.0	8.0		
	100	GORK	48	0752.2	0754.1	2.5	600.0			
	200	GORK	6	0753.5	0754.1	.9	10.0			
	100	HIRA	45	0753	0754.2	1.5	200.0	50.0		
	3000	BERL	1	0802.5	0803.4	2.5	3.8			
	8800	ATHN	1	0803.3	0803.7	1.6	3.5	1.1		
	6100	KISV	1	0803.5	0803.6	40	3.0			
	4995	ATHN	1	0803.4	0803.6	1.1	3.0	1.1		
	2695	MANI	1	0803.2	0803.5	.8	6.7	2.5		
	2695	ATHN	1	0803.4	0803.6	.7	6.2	1.9		
	1470	BERL	3	0803	0803.1	1	6.9	2.3		
	1415	MANI	1	0803.2	0803.5	.8	7.5	3.1		
	1415	ATHN	1	0803.4	0803.6	.7	5.7	1.7		
	950	GORK	3	0803	0803.6	1.4	7.3	4.0		
	650	GORK	1	0803.3	0803.6	.7	2.6	1.3		
	29	UPIC	45	0803	0803.5	2.5				
	100	HIRA	45	0816.2	0817	1.5	90.0	40.0		
	536	ONDR	45	0905	0905.5	4	40.0			
	29	UPIC	45	0905	0908.5	5				
	6100	KISV	20	0906	0908.5	8	4.0			
	3000	BERL	3	0906	0908.5	7	7.1	2.1		
	1470	BERL	2	0906.5	0908	5	4.7	1.5		
	9100	GORK	22	0907.5	0908.7	28.5	5.7	2.7		
	4995	ATHN	1	0907.5	0908.6	5.8	4.0	1.2		
	2695	ATHN	1	0907.6	0908.6	3	4.1	1.2		
	1415	ATHN	1	0907.4	0908.3	4.9	4.0	1.2		
	100	GORK	41	0939	0939.3	3	40.0			
	100	GORK		0939	094n.2		45.0			
	100	GORK		0939	094n.7		50.0			
	6100	KISV	20	0947	095n.3	10	3.0			
	3000	BERL	20	0947	0949.6	25	3.3			
	1470	BERL	20	0948	0949.5	12	1.5			
	9100	GORK	1	0949.5	095n.5	2.5	4.3	2.1		
	260	ONDR	45	0952.5	0956	6	15.0			
	2800	OTTA	24	1532	1536	4	1.4	0.7		
	2800	OTTA	27	1532		120	1.4	1.2		
	2800	OTTA	24	1536		90	1.4			
	18	MCMA	6	1550	1552	2			1	
	2800	OTTA	26	1706	1732	26	-1.4	-0.7		
	2800	OTTA	25	1825	2300	275	15.0	5.0		

SOLAR RADIO EMISSION
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JUNE 1974

JUN 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
30	9400	TYKW	28	2210	2213	13	8.0	4.0		
	3750	TYKW	28	2210	2213	13	5.0	2.0		
	2695	MANI	46	2221.8	2225	14	415.0	210.0		
	8800	MANI	47	2222.8	2228.9	13	620.0	290.0		
	4995	MANI	47	2222.4	2228.8	14.6	950.0	480.0		
	2800	OTTA	47	2222	2224.9	20	776.0	100.0		
	2695	SGMR	46	2222.8	2224.9	9.2	509.0	127.0		
	2695	SGMR	46		2229.6		269.0			
	2695	BOUL	45	2222	2226.5	85	302.0	60.0		
	2000	TYKW	45	2222	2225.1	21	260.0	40.0		
	1420	BOUL	45	2222.5	2227	41	92.0	31.0		
	1415	SGMR	46	2222.9	2225.5	8.1	188.6	37.7		
	1415	SGMR	46		2228.1		96.2			
	1415	MANI	46	2222.3	2225.5	13.5	210.0	101.0		
	606	MANI	46	2222.7	2226.1	17.8	210.0	105.0		
	15400	SGMR	47	2223.3	2225.4	9.7	544.0	226.0		
	15400	SGMR	47		2229		565.0			
	10700	PENN	45	2223.1	2229.1	10.4	752.0	284.0		
	9400	TYKW	45	2223	2228.9	21	900.0	165.0		
	8800	SGMR	47	2223.4	2225.4	8.6	503.0	306.0		
	8800	SGMR	47		2229		1020.0			
	4995	SGMR	47	2223.4	2225.5	8.1	212.0	238.0		
	4995	SGMR	47		2229		595.0			
	3750	TYKW	45	2223	2229.6	20	470.0	95.0		
	2700	PENN	45	2223		17.7	146.0D			
	1000	TYKW	45	2223	2225.7	19	60.0	15.0		
	960	PENN	45	2223.3	2225.9	15.5	148.0	27.4		
	606	SGMR	46	2223	2226.4	7.3	161.8	32.3		
	606	SGMR	46		2228.4		136.7			
	410	SGMR	49	2223.8	2228.1	36.8	620.0	248.0		
	245	SGMR	49	2223.5	2228.1	39.5	996.8	398.7		
	35000	SGMR	46	2224.6	2225.6	8.9	331.0	72.2		
	35000	SGMR	46		2229		361.0			
	202	VORO	48	2224	2228	22		720.0		
	200	HIRA	45	2224		21	180.0D	110.0D		
	100	HIRA	45	2224	2227.1	17	1000.0D	50.0D		
	4995	BOUL	45	2225	2230	29	412.0	109.0		
	606	SGMR	30	2230.3	2230.3	52.2	26.5	8.0		
	4995	SGMR	30	2231.5	2231.5	48.8	34.2	10.3		
	1415	SGMR	30	2231	2231	50	18.3	5.5		
	8800	SGMR	30	2232	2232	37.5	35.9	10.8		
	2695	SGMR	30	2232	2232	37.3	57.0	17.1		
	15400	SGMR	30	2233	2233	36.5	77.1	21.9		
	10700	PENN	29	2233.5	2233.5	40 D	94.0	47.0		
	8800	MANI	30	2235.8	2235.8	52.5	55.0	13.8		
	2695	MANI	30	2235.8	2235.8	26.2	19.1	4.2		
	1415	MANI	30	2235.8	2235.8	31.5	8.8	1.8		
	4995	MANI	30	2237	2237	48.5	20.0	4.0		
	2700	PENN	31	2240.6	2244.4	19.4	-6.8	-3.4		
	960	PENN	45	2241.2	2248.5	23.2	80.6	5.8		
	3750	TYKW	29	2243		3	5.0	5.0		
	9400	TYKW	29	2244		2	8.0	8.0		
	4995	SGMR	4	2244	2247.9	8.7	36.0	10.8		
	2700	PENN	45	2244.4	2248.2	10.9	59.7	11.2		
	2695	SGMR	4	2244.7	2248.1	7.1	75.9	22.8		
	2000	TYKW	2	2245	2248.1	12	48.0	8.0		
	1415	SGMR	4	2245	2248	7.2	56.9	17.1		
	1415	MANI	4	2245.2	2248	5.8	60.0	17.6		
	1000	TYKW	45	2245	2248.2	10	42.0	7.0		
	606	SGMR	4	2245.7	2248	9.4	103.4	31.0		
	606	MANI	40	2245.7	2248	20.2	120.0	34.3		
	15400	SGMR	4	2246.2	2248	4.7	191.3	57.4		
	10700	PENN	3	2246.2	2248.1	7.4	235.0	40.6		
	9400	TYKW	3	2246	2247.8	4	265.0	75.0		
	8800	SGMR	4	2246.1	2247.9	4.9	55.5	15.4		
	8800	MANI	4	2246.1	2247.9	4.8	215.0	61.0		
	4995	MANI	4	2246.1	2247.9	4.8	174.0	56.0		
	3750	TYKW	3	2246	2247.8	6	113.0	30.0		
	2800	OTTA	4	2246.2	2248	6	71.0	18.0		
	2695	MANI	4	2246.3	2247.9	4.2	61.0	20.8		
	100	HIRA	45	2247	2247.8	2	110.0	25.0		
	9400	TYKW	29	2250		60	32.0	10.0		
	3750	TYKW	29	2252		40	2.0	1.0		
	2800	OTTA	24	2300		10 D	15.0			
	100	HIRA	27	2318	2346	94	15.0	7.0		

Observatories:

ABST = Abastumani
ARCE = Arcetri
BERL = Berlin-Adlershof
BERN = Berne
BORD = Bordeaux
BOUL = Boulder
CANR = Canary Islands
CRIM = Simferopol
CRON = Carnarvon
DWIN = Dwingeloo
GORK = Gorky
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = Moscow IZMIRAN
KIEV = Kiev
KISV = Kislovodsk
MANI = Manila
MCMA = McMath-Hulbert
ONDR = Ondrejov
OTTA = Ottawa ARO
PENN = Penn. State Univ.
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
SLOU = Slough
TRST = Trieste
TYKW = Toyokawa
UPIC = Upice
VORO = Voroshilov

Explanation of Type Code:

1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
32 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise storm in Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

SGD 364 Part II (Comprehensive)

MAY 1974 DATA

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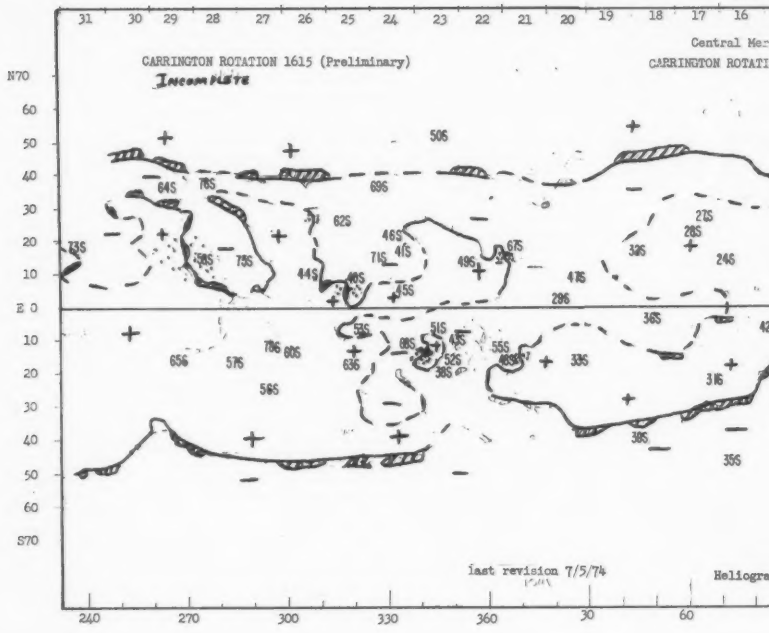
For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

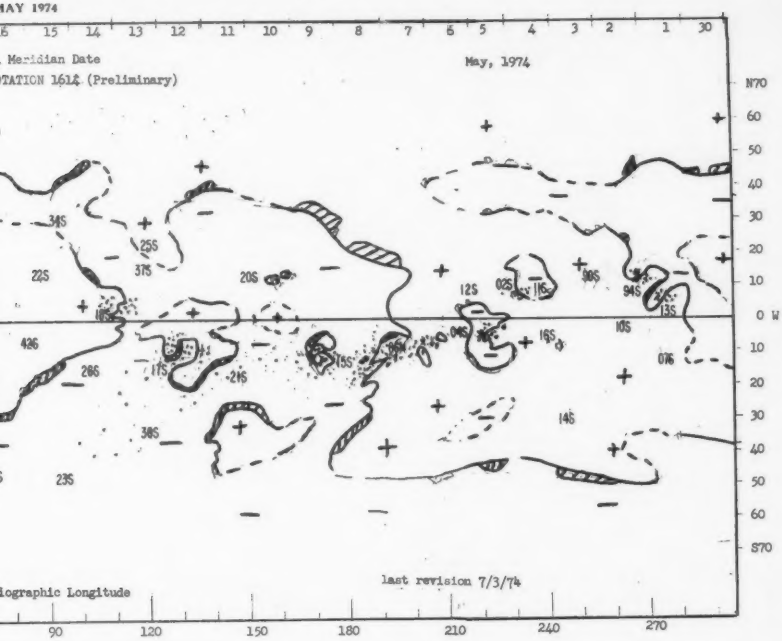
ABBREVIATED CA

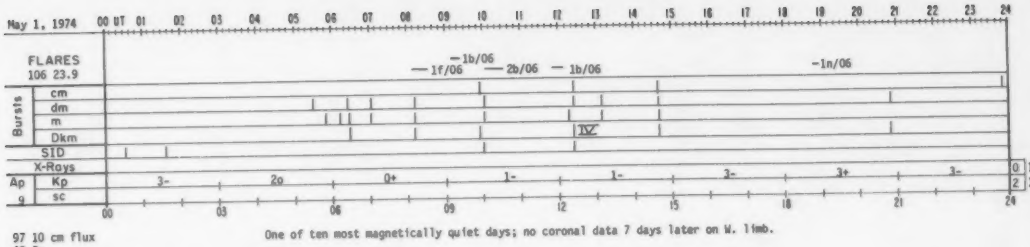
MAY



CALENDAR RECORD

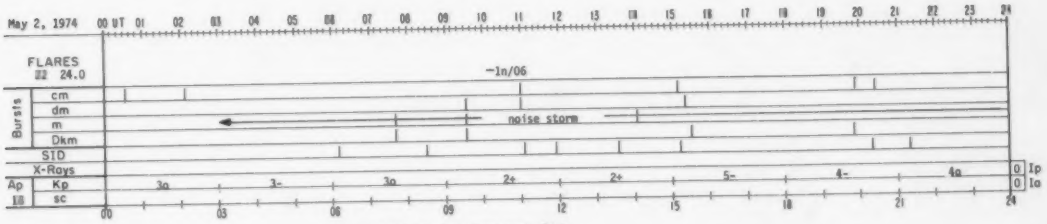
MAY 1974





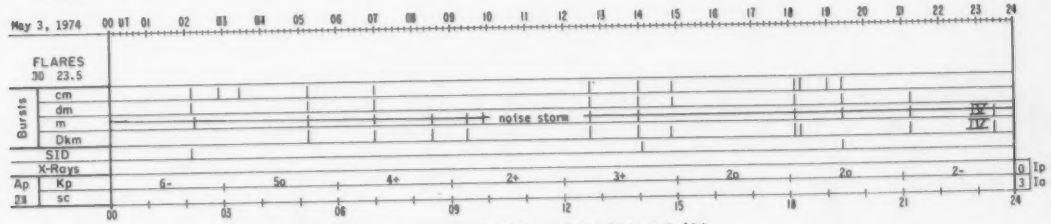
97 10 cm flux
48 Rz
CMP 12907 S13
(12913) N05 19376 N05 CMP April 30

One of ten most magnetically quiet days; no coronal data 7 days later on W. limb.



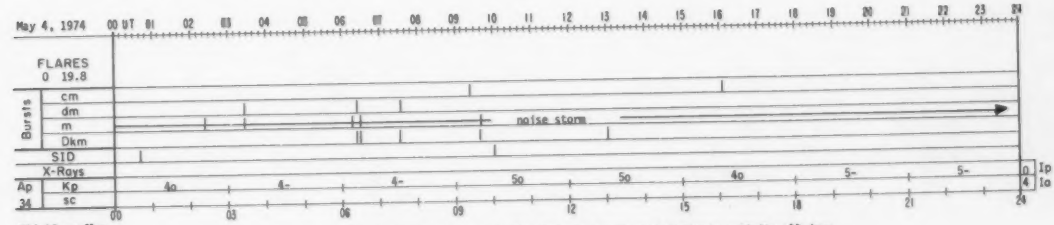
111 10 cm flux
70 Rz
CMP 12894 N11 (19383) N11 (βp)2 CMP May 1
12910 S01

No coronal data 7 days later on W. limb.



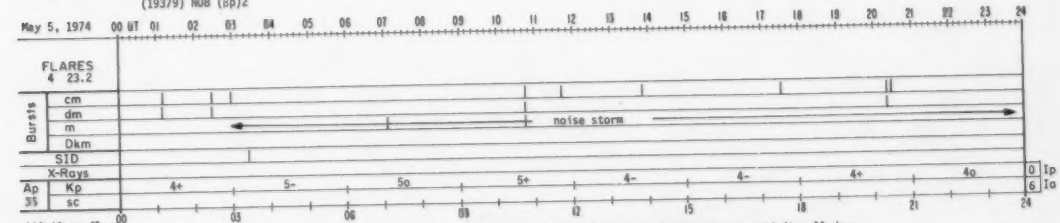
114 10 cm flux
89 Rz
CMP 12899 N14 (3)
12914 S31

No coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.



116 10 cm flux
103 Rz
CMP (12916) S08 (19385) S09 (αf)1 CMP May 3
(12911) N09
12902 N08 (19373) N08 (αp)2
(19379) N08 (βp)2

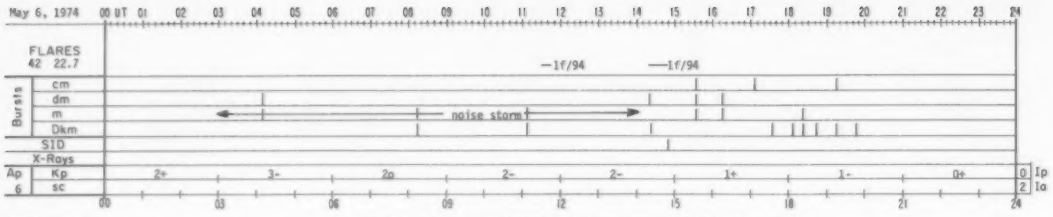
One of five most magnetically disturbed days, with moderate activity all day; no coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.



118 10 cm flux
106 Rz
CMP 12904 S05 (2) 19371 S03 (βp)5 CMP May 4
(19380) S06 (αp)1 CMP May 4
19384 S06 (βf)4

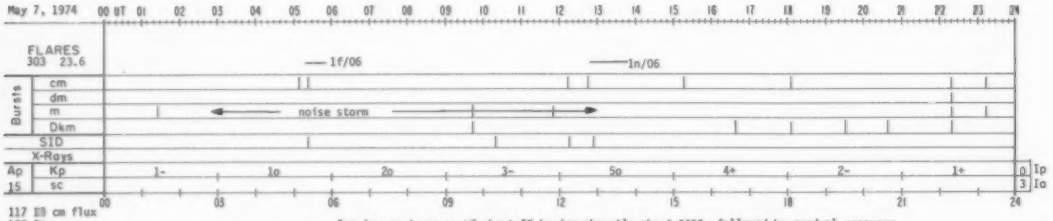
(12912) N08

One of five most magnetically disturbed days, with moderate activity all day; moderately br. green corona 7 days earlier on SE limb, no coronal data 7 days later on W. limb.



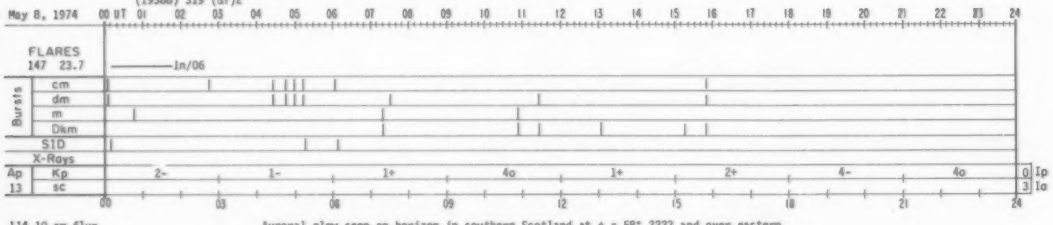
121 10 cm flux
113 Rz

One of five most magnetically quiet days; no coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.



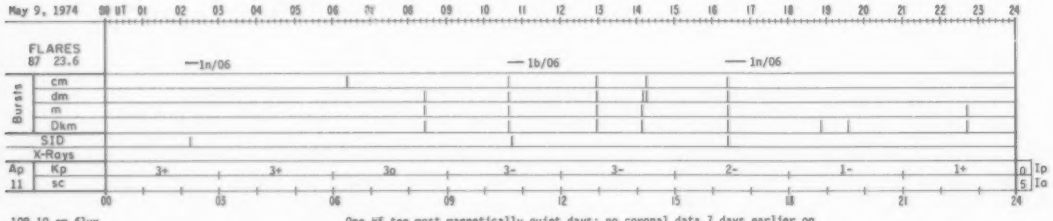
117 10 cm flux
109 Rz
CMP 12906 S12 (2) 19374 S08 (αp)5 CMP May 6
19377 S10 (α) 3
19378 S13 (βp)5
(19381) S16 (α) 2
19386 S09 (α) 2 CMP May 8
(19388) S19 (αf)2

Cosmic ray decrease of about 8% begins abruptly about 0600, followed by gradual recovery complete on May 12; moderately br. green corona 7 days later on NW limb.



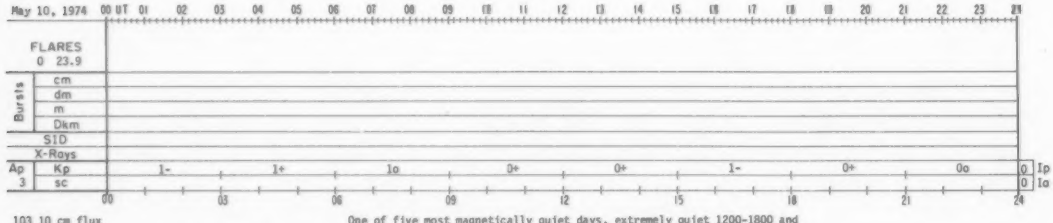
114 10 cm flux
106 Rz

Auroral glow seen on horizon in southern Scotland at ϕ = 58° 2223 and over eastern Atlantic at ϕ = 59° 2250-2310 when it was obscured by moonlight; no coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.



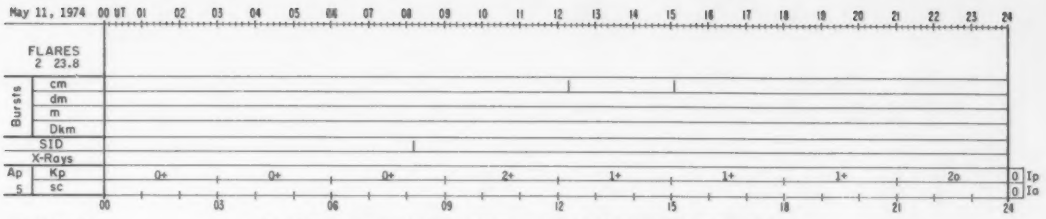
108 10 cm flux
91 Rz
CMP 12915 S13 (2) 19382 S12 (αp)5 CMP May 8
(19392) S10 (βp)3 CMP May 8

One of ten most magnetically quiet days; no coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.



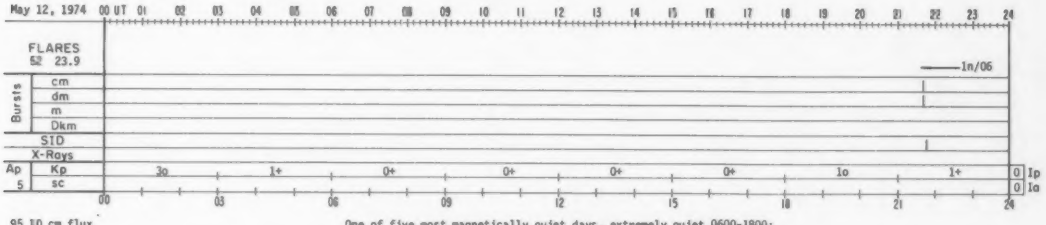
103 10 cm flux
69 Rz
CMP 12920 N12 (19389) N12 (βp 2 CMP May 9

One of five most magnetically quiet days, extremely quiet 1200-1800 and 2100-2400; no coronal data 7 days earlier on E. limb.



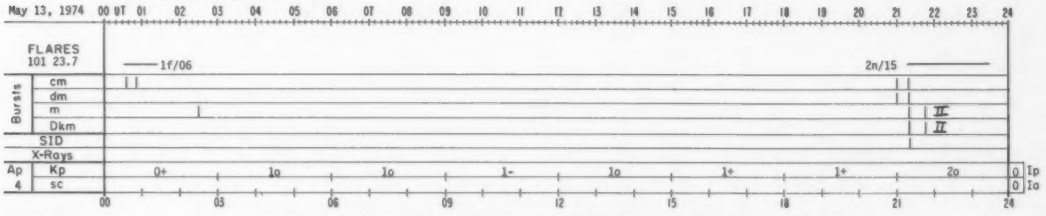
102 10 cm flux
64 Rz
CMP 12921 S17 (4)

One of five most magnetically quiet days, extremely quiet 0000-0900; no coronal data 7 days earlier on E. limb, moderately br. green corona 7 days later on SW limb.



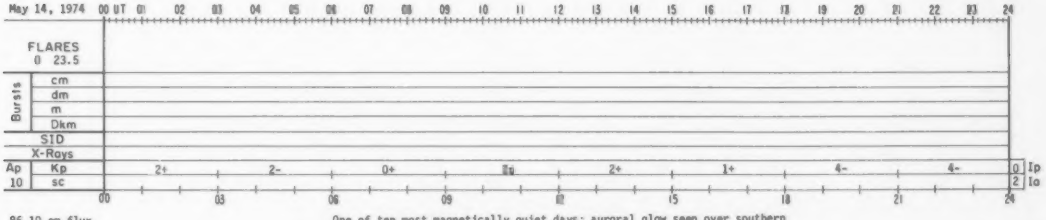
95 10 cm flux
[illegible] Rz
CMP 12917 S12 (2) (19387) S10 (αf)2
19391 S16 (αp)2 CMP May 11
(19393) S12 (αf)2

One of five most magnetically quiet days, extremely quiet 0600-1800; cosmic ray decrease which began on May 7 has returned to normal; no coronal data 7 days earlier on E. limb.



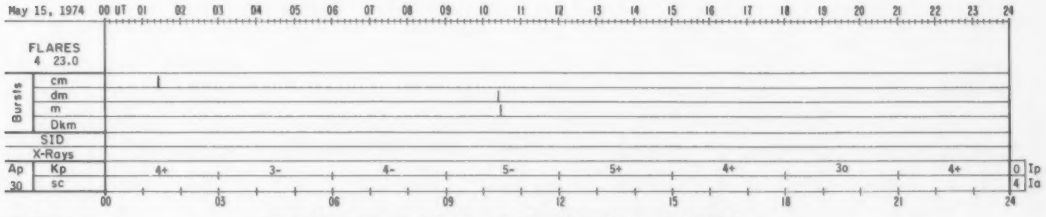
92 10 cm flux
40 Rz
CMP (12930) S33
(12937) N16
(12925) N21

One of five most magnetically quiet days, extremely quiet 0000-0300; br. green corona 7 days earlier on E. limb, no coronal data 7 days later on W. limb.



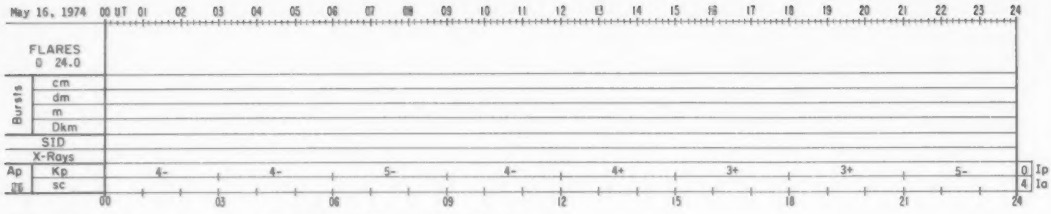
86 10 cm flux
35 Rz
CMP 12918 N04 (2) 19390 N06 (α)1 CMP May 13
12926 S15

One of ten most magnetically quiet days; auroral glow seen over southern Scotland at ϕ = 58° 2110-2305; no coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.



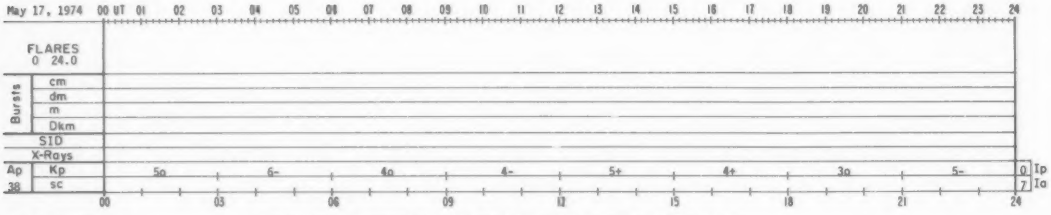
83 10 cm flux
24 Rz
CMP (12823) S46
(12934) N28
(12922) N13
(12942) S07

One of five most magnetically disturbed days, with slight to moderate activity all day; auroral glow seen over southern Scotland at ϕ = 58° 2100-2315; no coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.



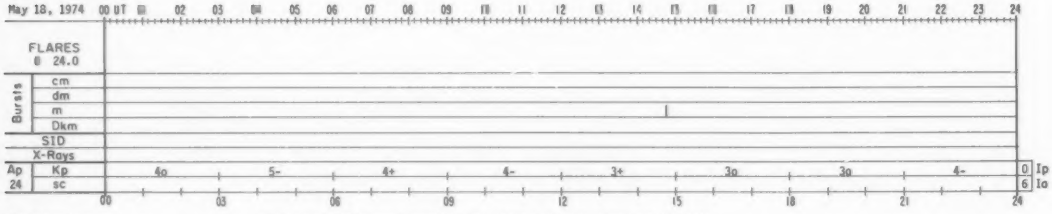
78 10 cm flux
16 Rz
CMP (12935) S45
(12924) N14

No coronal data 7 days earlier on E. limb.



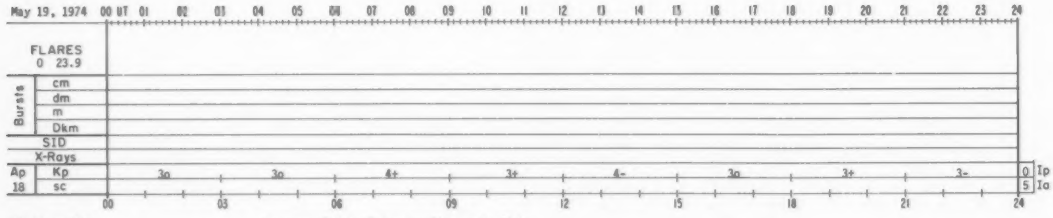
74 10 cm flux
8 Rz
CMP 12931 S22
(12927) N26
(12928) N21

One of five most magnetically disturbed days, with moderate activity all day.



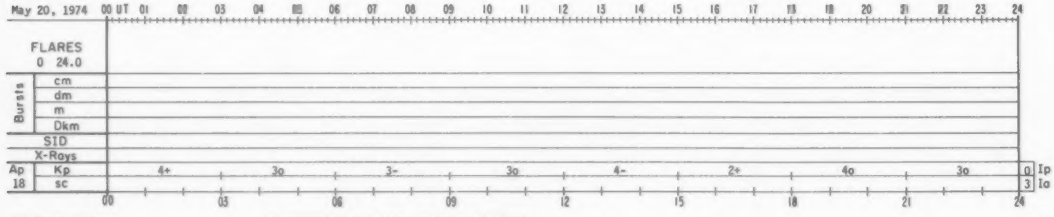
73 10 cm flux
0 Rz
CMP 12936 S02
(12939) S37
(12932) N17

No coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.



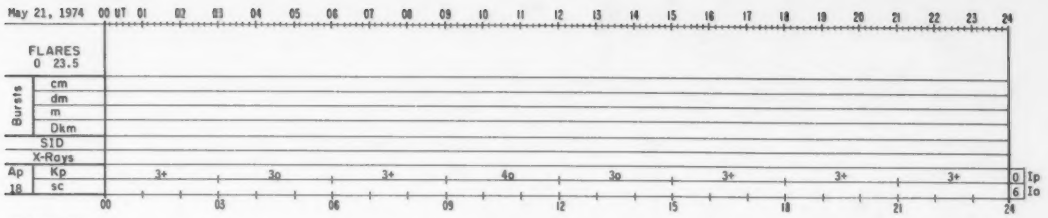
71 10 cm flux
0 Rz

No coronal data 7 days earlier on E. limb.

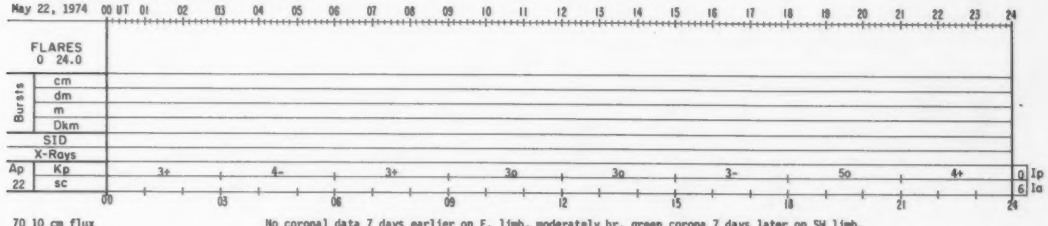


71 10 cm flux
0 Rz
CMP (12933) S16
(12947) N08
(12929) N03 (2)

No coronal data 7 days earlier on E. limb.

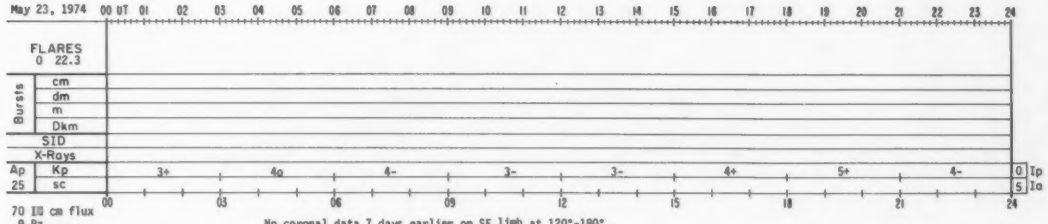


70 10 cm flux
0 Rz
CMP (12948) S17 (19394) S18 (β)2
(12967) N16 (19395) N16 βp CMP May 22



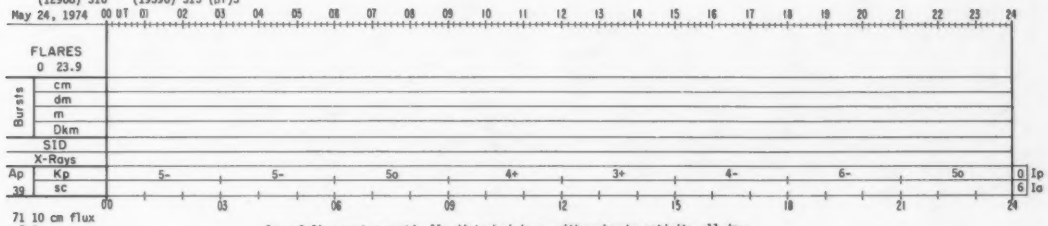
70 10 cm flux
7 Rz
CMP (12955) S13
12949 N13

No coronal data 7 days earlier on E. limb, moderately br. green corona 7 days later on SW limb.



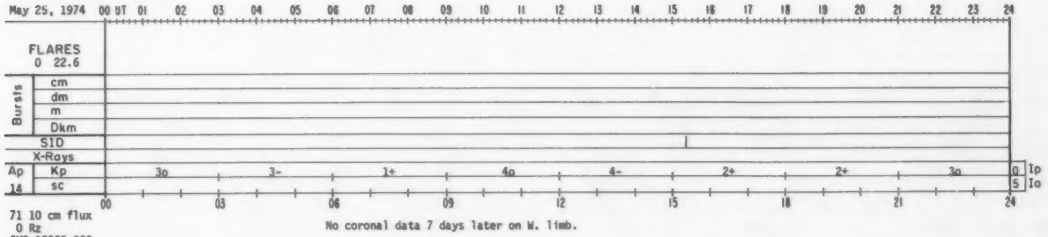
70 10 cm flux
9 Rz
CMP (12943) S09
(12950) N52
(12951) S08
12952 S14
(12938) S15
(12968) S16 (19396) S15 (βf)3

No coronal data 7 days earlier on SE limb at 120°-180°.



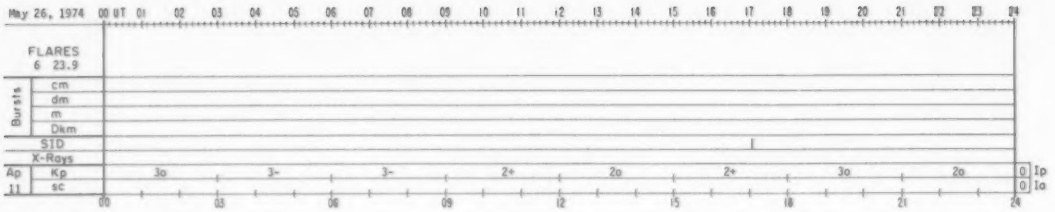
71 10 cm flux
7 Rz
CMP (12941) N19
(12946) N19
(12945) N06
(12969) N36
(12971) N14

One of five most magnetically disturbed days, with moderate activity all day.

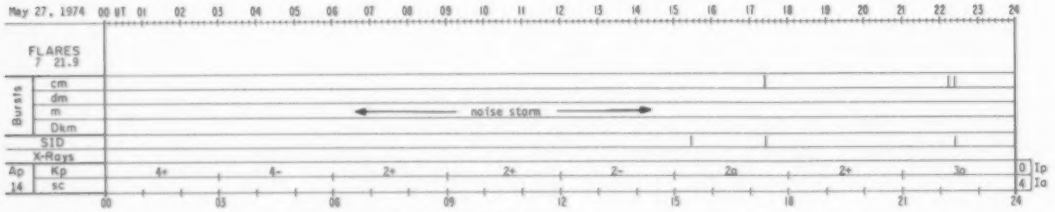


71 10 cm flux
0 Rz
CMP 12953 S09
12963 S18
12940 N05 (19397) N03 α CMP May 24
12962 N25

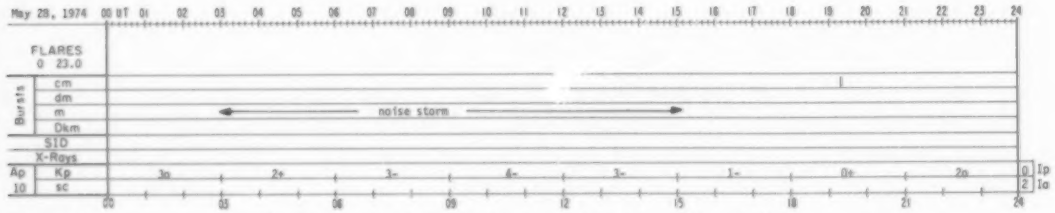
No coronal data 7 days later on W. limb.



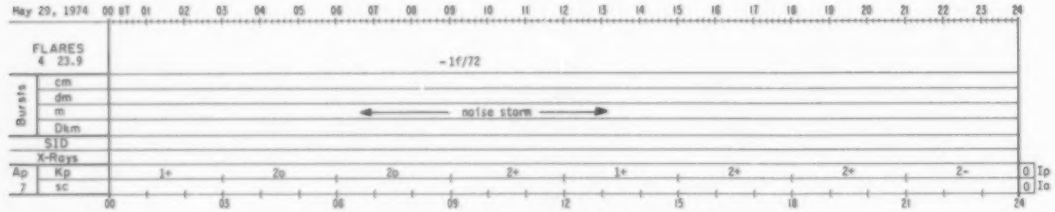
78 10 cm flux
20 Rz
CMP 12944 N08 (2)
(12960) S12



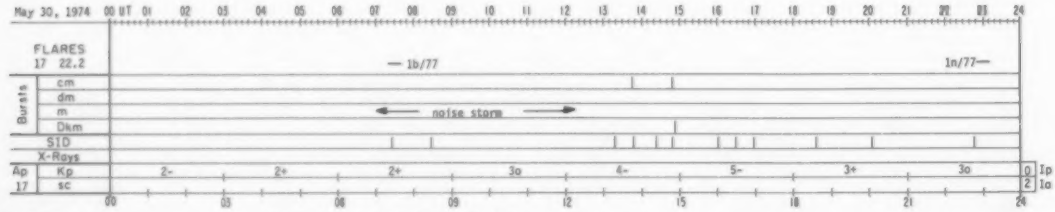
83 10 cm flux
18 Rz
No coronal data 7 days earlier on E. limb.
CMP (12978) S12
(12956) S25
(12975) N15



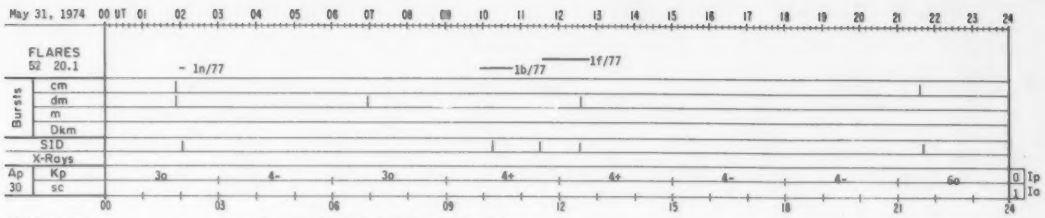
86 10 cm flux
32 Rz
One of ten most magnetically quiet days, no coronal data 7 days earlier on E. limb.
CMP (12957) S16
12954 N04 (2)
(12976) N38



87 10 cm flux
20 Rz
One of ten most magnetically quiet days; no coronal data 7 days earlier on E. limb.
CMP 12958 N12 (2)
(12965) S16
(12964) N35



89 10 cm flux
0 Rz
No coronal data 7 days later on W. limb.



92 10 cm flux
52 Rz
CMP (12973) N17 N15

No coronal data 7 days later on W. limb.

REGIONAL FLARE INDEX

MAY 1974

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
12894	N11	74/05/02.2	74/05/04	74/05/06	16.92	16.92	3
12902	N 8	74/05/04.9	74/05/16	74/05/16	24.76	24.76	1
12904	S 5	74/05/09.6	74/04/30	74/04/30	7.10	7.10	1
12906	S11	74/05/07.7	74/04/30	74/05/13	854.15	61.01	31
12915	S13	74/05/19.4	74/05/13	74/05/15	91.93	33.64	4
12917	S12	74/05/12.4	74/05/17	74/05/17	3.14	3.14	1
12918	N 4	74/05/14.1	74/05/18	74/05/18	5.17	5.17	1
12968	S15	74/05/23.7	74/05/26	74/05/27	12.22	6.11	3

Note:
The Regional Flare Index and count of flares in each region has in previous months included each maximum of a multi-maximum event. This has caused some regions to appear to be more flare producing than is probably warranted. Beginning with April 1972 only the principal maximum of a multi-maximum event will be used in the calculation. Also note that only the Confirmed Events as selected for the "I.A.U. Quarterly Bulletin on Solar Activity" are included in the calculation.

Because of differences in method of calculation, the dates of Central Meridian Passage for the McMath Plage Regions vary somewhat from those given elsewhere. Any region not listed here produced no confirmed flares during its disk passage.

MISCELLANEOUS DATA

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For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

COSMIC RAY INDICES

(Pressure Corrected Hourly Totals)

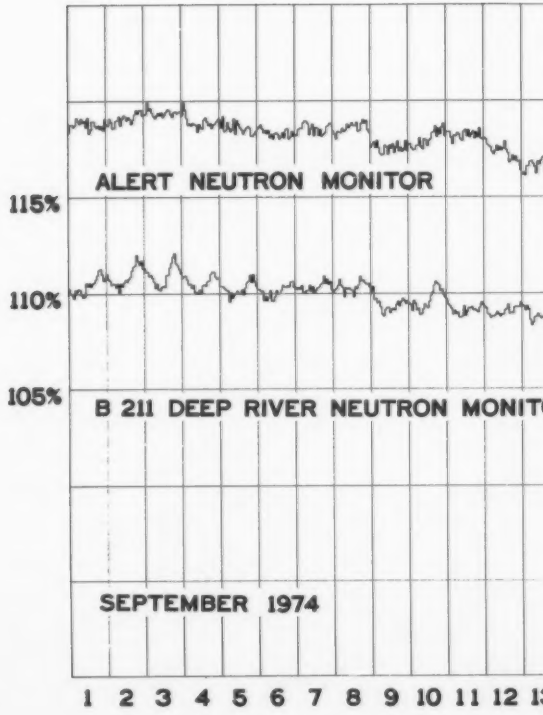
SEPTEMBER 1974

DATE	ALERT	DEEP RIVER
1	7261.9	6794.8
2	7281.8	6824.8
3	7303.4	6829.2
4	7270.4	6804.5
5	7249.0	6784.7
6	7231.4	6774.5
7	7246.4	6789.1
8	7248.6	6789.8
9	7179.2	6733.0
10	7209.2	6747.5
11	7224.0	6714.9
12	7164.8	6709.3
13	7082.0	6664.2
14	6984.3	6554.0
15	6890.8	6511.5
16	6821.9	6429.9
17	6889.5	6464.4
18	6999.4	6549.9
19	6921.9	6492.1
20	7088.0	6602.1
21	7115.9	6650.7
22	7161.2	6725.0
23	7266.3	6820.4
24	7262.7	6828.6
25	7235.0	6790.9
26	7224.7	6806.6
27	7204.9	6744.3
28	7211.3	6750.0
29	7236.7 (20)	6784.3
30	7222.0 (1)	6779.6

COS

(Pressure

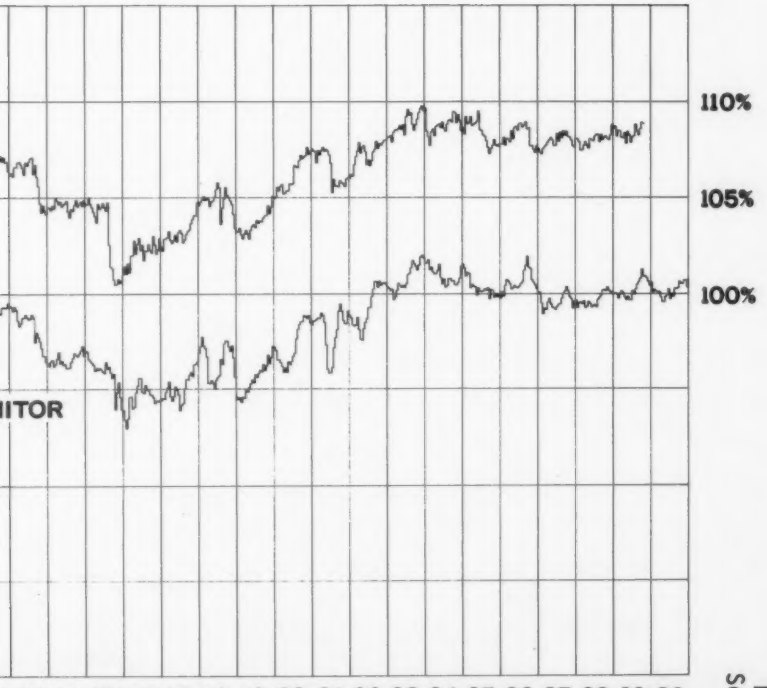
SE



COSMIC RAY INDICES

(Figure Corrected Hourly Totals)

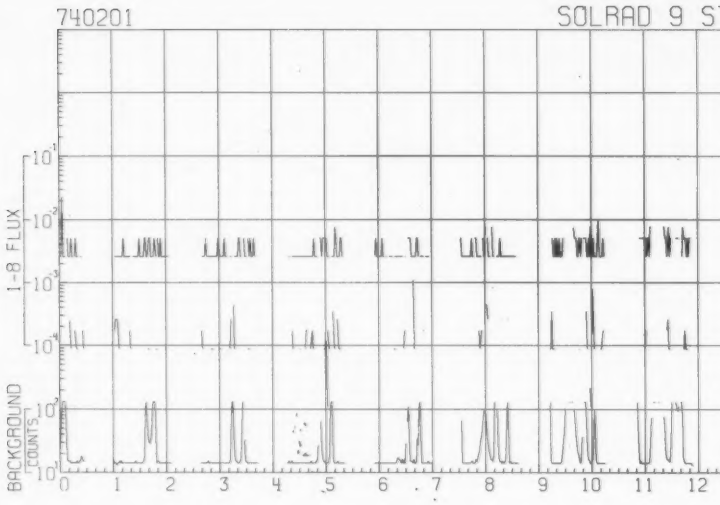
SEPTEMBER 1974

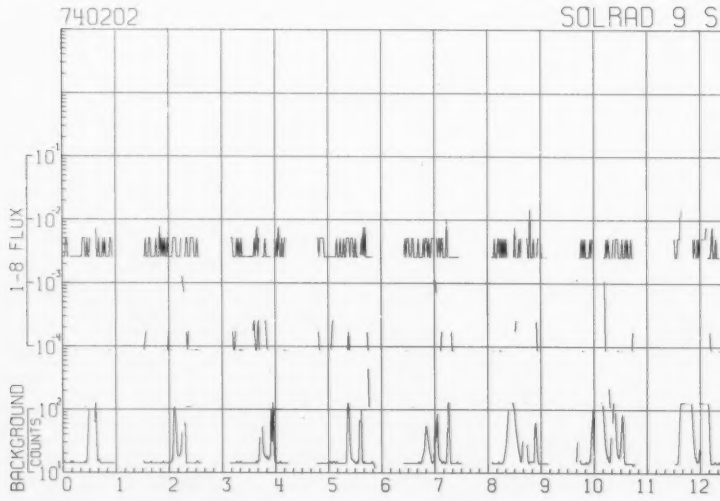


43
Misc
Sep 74

SOLAR X-RAYS MEASURED BY SATE

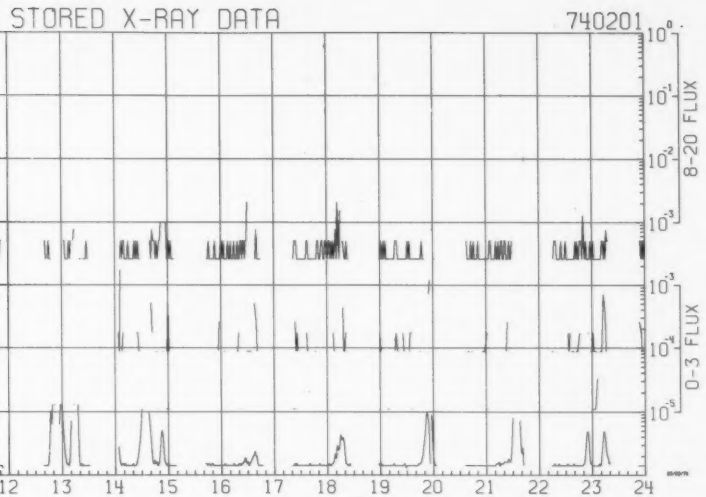
FEBRUAR

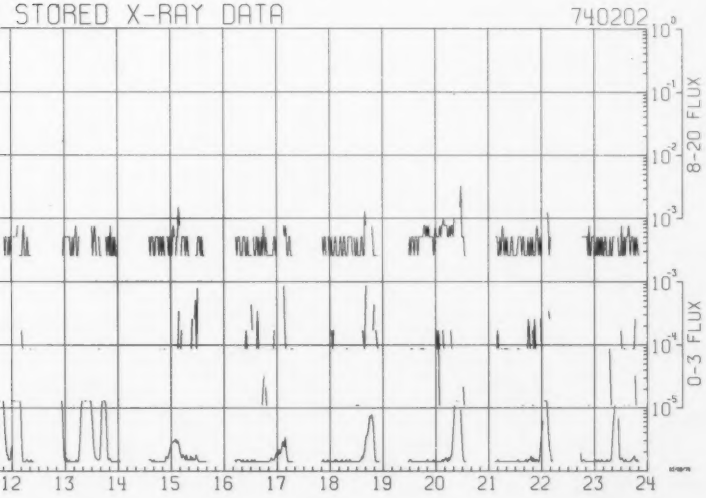


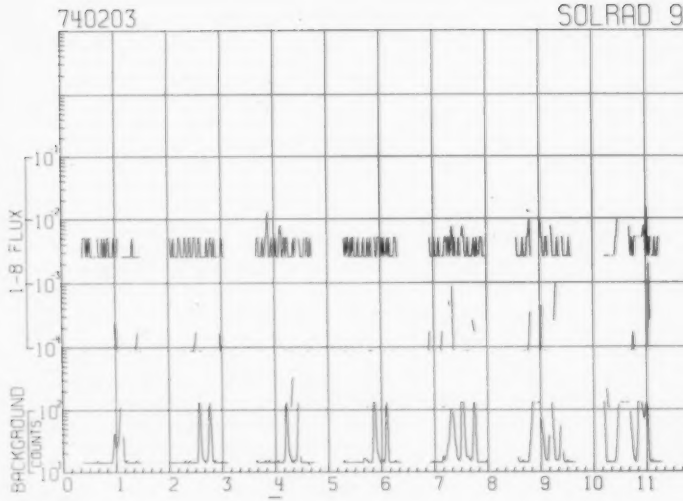


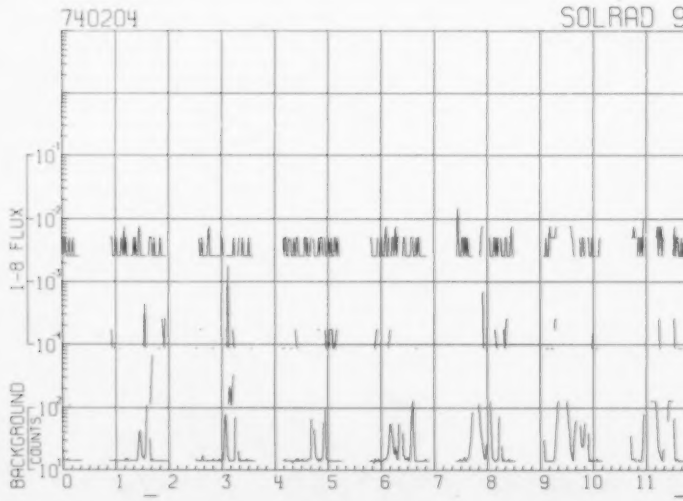
TELLITE SOLRAD 9 - EXPLORER 37

ARY 1974





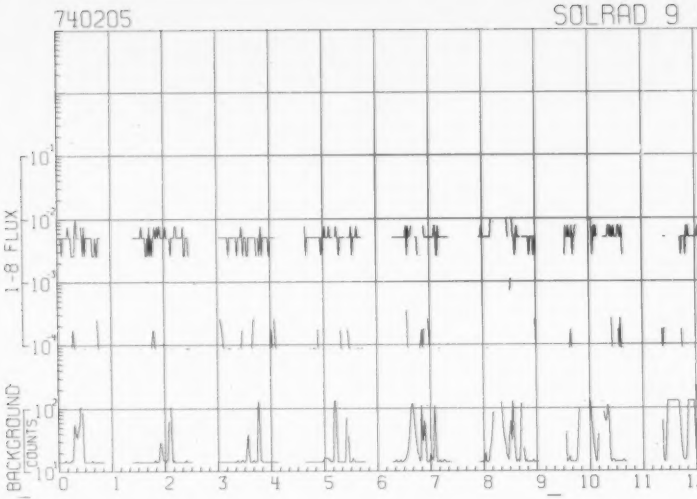

740203
SOLRAD 9
1-8 FLUX
BACKGROUND
[COUNTS]
0 1 2 3 4 5 6 7 8 9 10 11

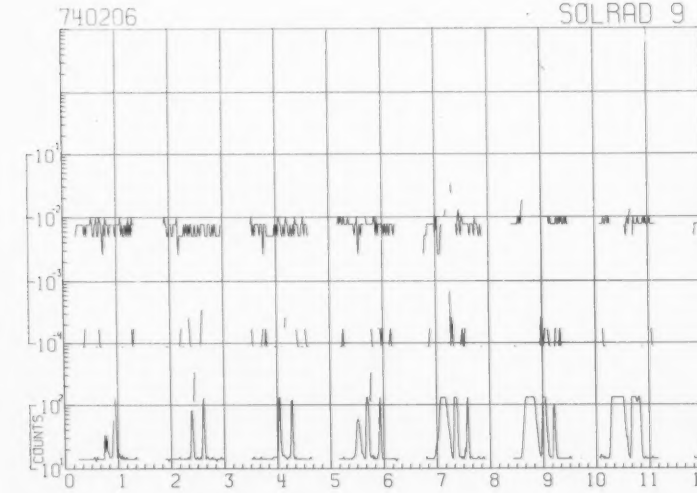

740204
SOLRAD 9
1-8 FLUX
BACKGROUND
[COUNTS]
0 1 2 3 4 5 6 7 8 9 10 11

9 STORED X-RAY DATA 740203

9 STORED X-RAY DATA 740204

45
Misc
Feb 74

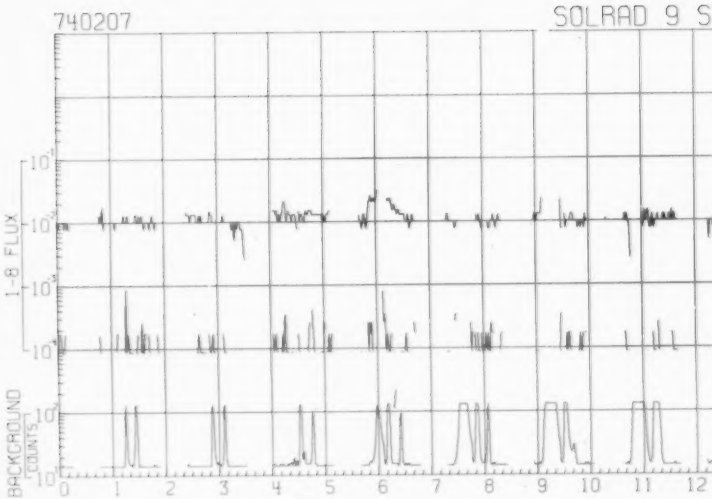

740205
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

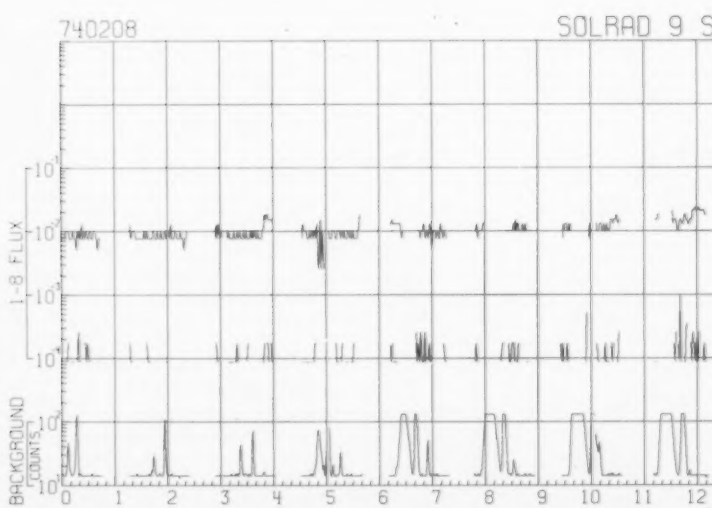

740206
SOLRAD 9
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

46
Misc
Feb 74

9 STORED X-RAY DATA 740205

9 STORED X-RAY DATA 740206

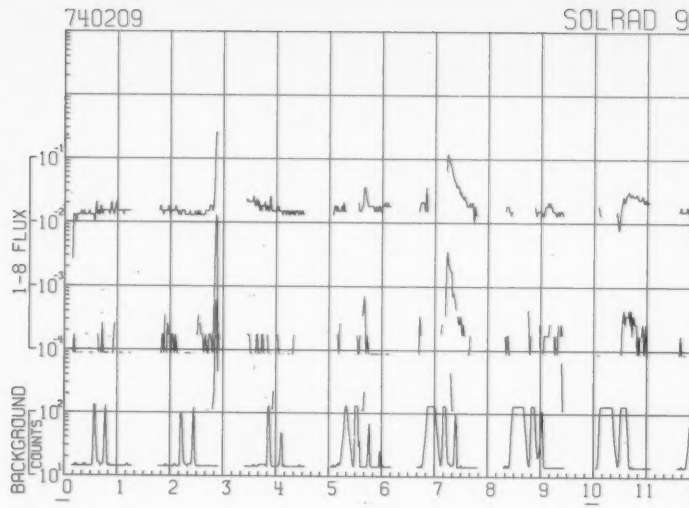

740207
SOLRAD 9 S
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11 12

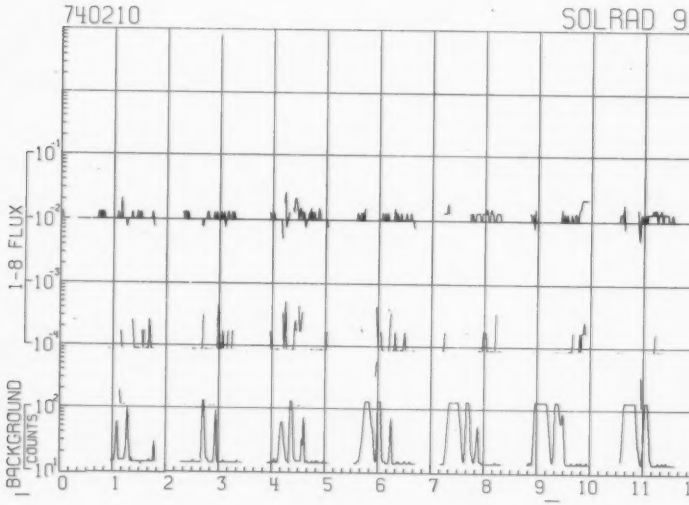

740208
SOLRAD 9 S
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11 12

STORED X-RAY DATA 740207

STORED X-RAY DATA 740208

47
Misc
Feb 74


740209
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11


740210
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

48
Misc
Feb 74

9 STORED X-RAY DATA 740209

8-20 FLUX

0-3 FLUX

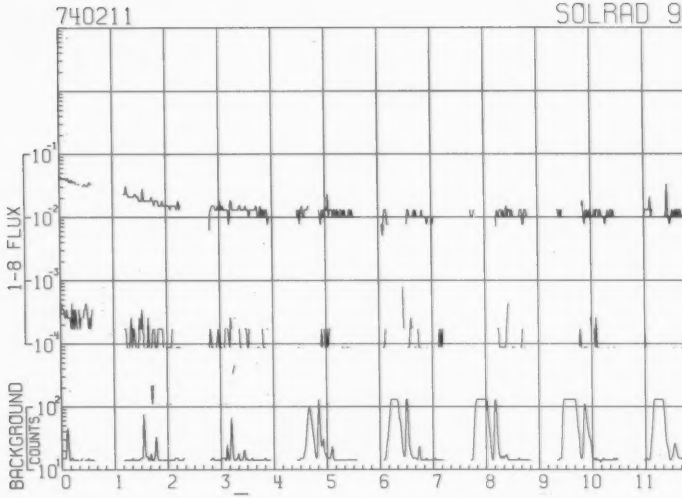
12 13 14 15 16 17 18 19 20 21 22 23 24

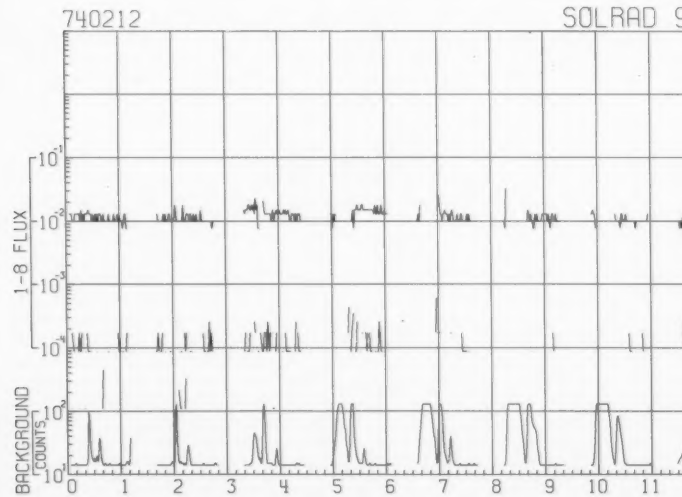
9 STORED X-RAY DATA 740210

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24


740211
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11


740212
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

9 STORED X-RAY DATA 740211

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

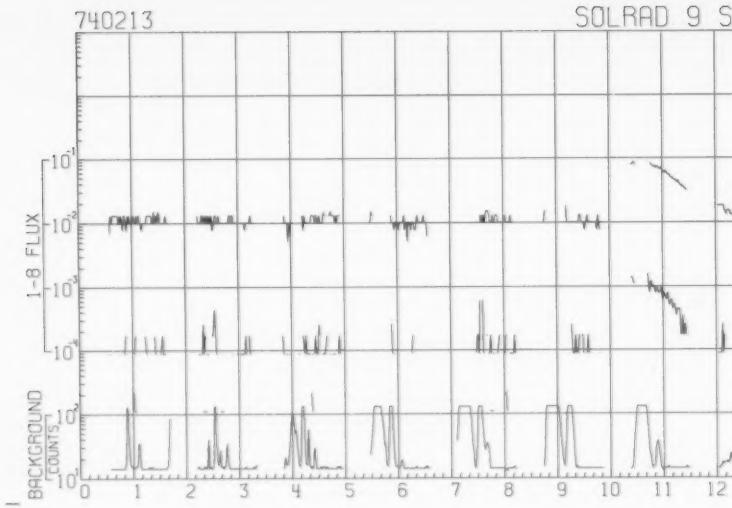
9 STORED X-RAY DATA 740212

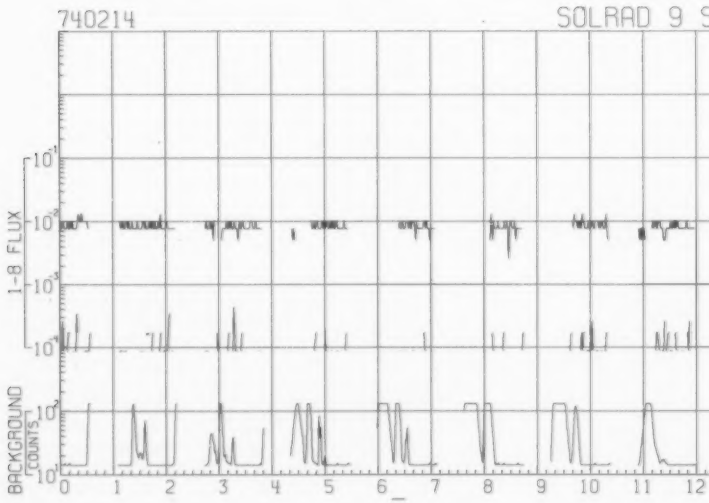
8-20 FLUX

0-3 FLUX

1 12 13 14 15 16 17 18 19 20 21 22 23 24

49
Misc
Feb 74


740213
SOLRAD 9 S
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11 12


740214
SOLRAD 9 S
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11 12

50
Misc
Feb 74

STORED X-RAY DATA 740213

8-20 FLUX

0-3 FLUX

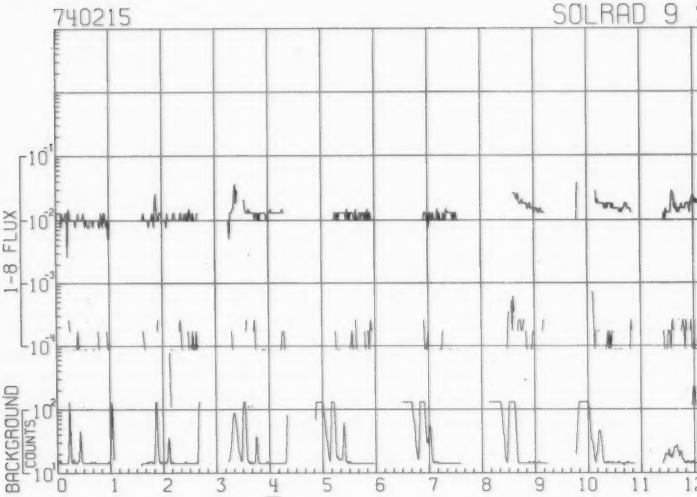
12 13 14 15 16 17 18 19 20 21 22 23 24

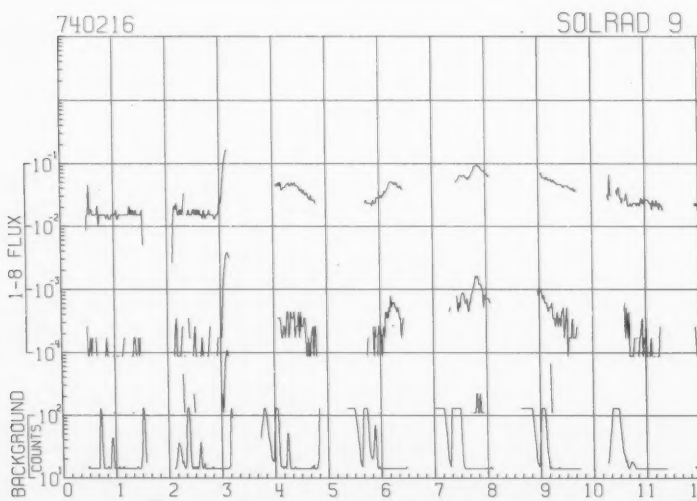
STORED X-RAY DATA 740214

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

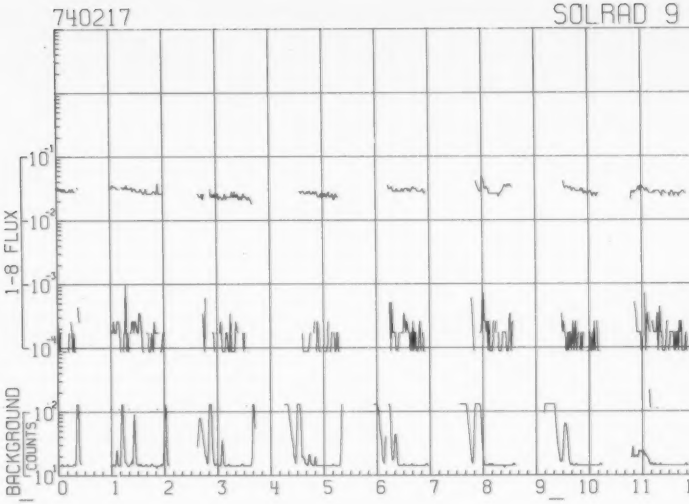

740215
SOLRAD 9
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

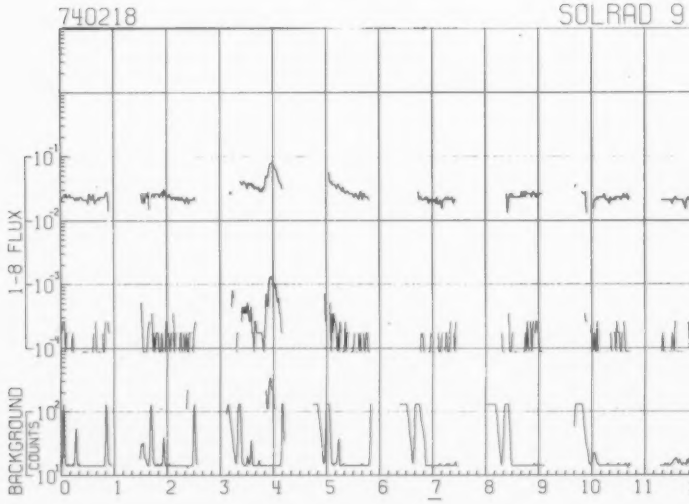

740216
SOLRAD 9
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

9 STORED X-RAY DATA 740215

9 STORED X-RAY DATA 740216

51
Misc
Feb 74


740217
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11


740218
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

52
Misc
Feb 74

9 STORED X-RAY DATA 740217

8-20 FLUX

0-3 FLUX

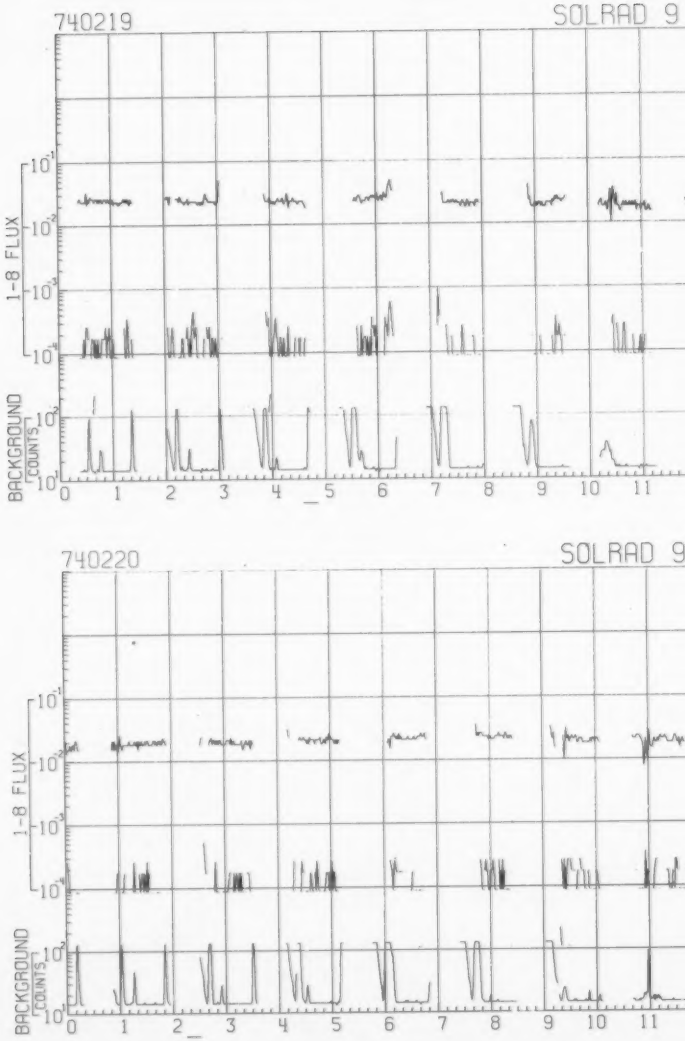
12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA 740218

8-20 FLUX

0-3 FLUX

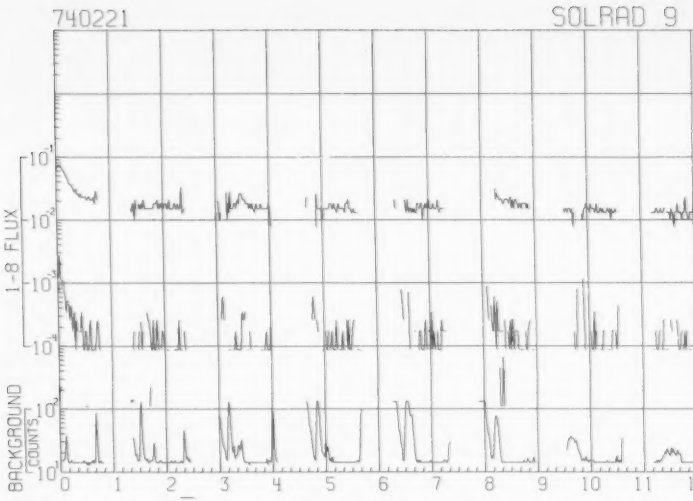
12 13 14 15 16 17 18 19 20 21 22 23 24

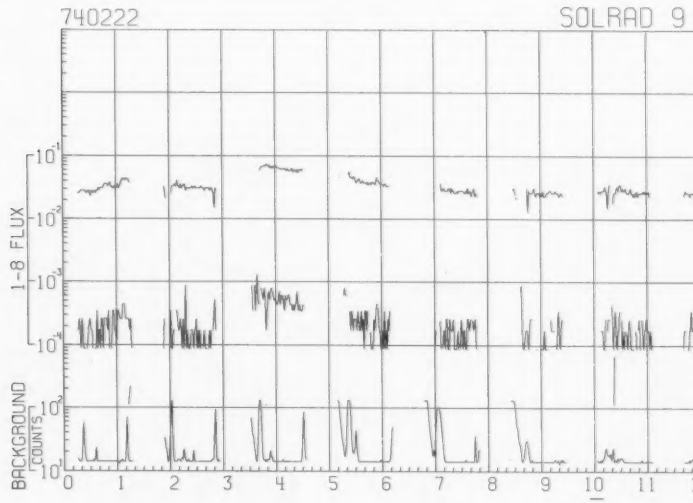

740219
SOLRAD 9
1-8 FLUX
BACKGROUND
(COUNTS)
0 1 2 3 4 5 6 7 8 9 10 11
740220
SOLRAD 9
1-8 FLUX
BACKGROUND
(COUNTS)
0 1 2 3 4 5 6 7 8 9 10 11

9 STORED X-RAY DATA 740219

9 STORED X-RAY DATA 740220

53
Misc
Feb 74


740221
SOLRAD 9
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11


740222
SOLRAD 9
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

54
Misc
Feb 74

9 STORED X-RAY DATA

740221

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

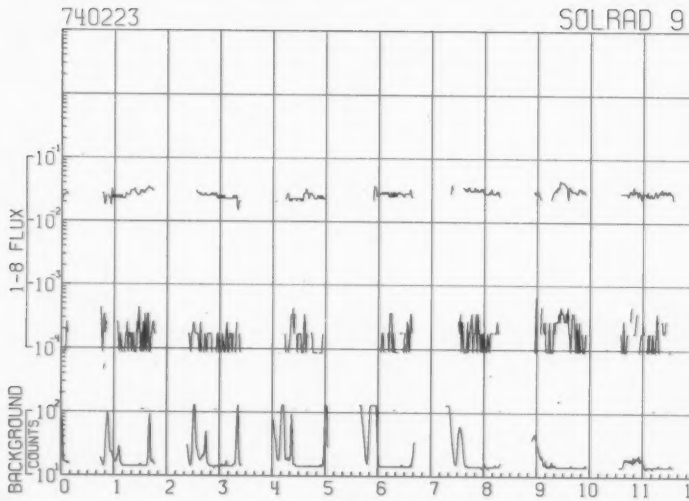
9 STORED X-RAY DATA

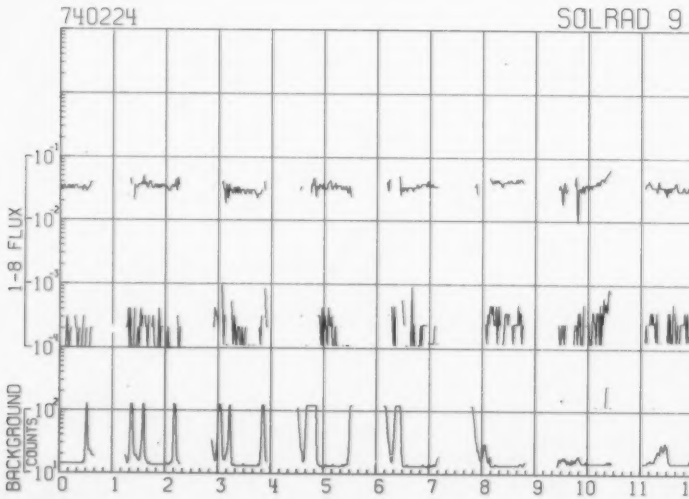
740222

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24


740223
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11


740224
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

9 STORED X-RAY DATA

740223

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA

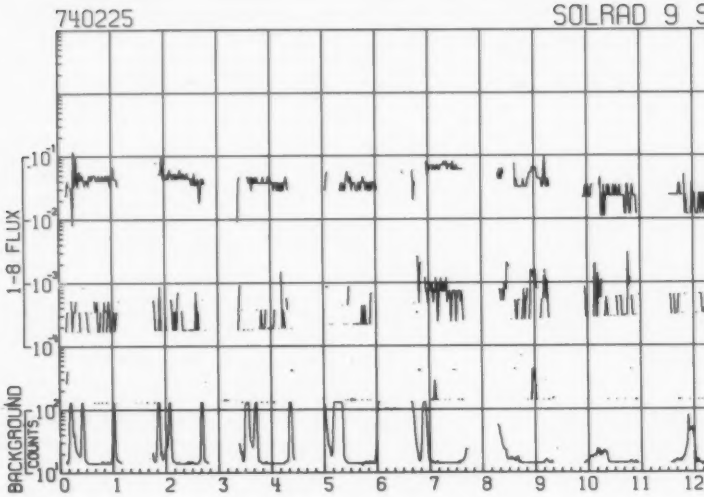
740224

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

55
Misc
Feb 74


740225
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0
1
2
3
4
5
6
7
8
9
10
11
12

56
Misc
Feb 74

SOLAR X-RAYS MEA

SOLRAD 9

MA

NAVAL RESEARCH LABORATORY 1 - 8A HOURLY AVERAGES (10^{-3} ergs/cm^2

DAY	1	2	3	4	5	6	7	8	9	10	11	H
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14	0,16	0,16	0,14	0,18	0,10	0,16	0,11	0,14	0,12	0,15	0,14	0
15	0,17	0,13	0,14	0,14	0,14	0,14	0,12	0,15	0,11	0,13	0,13	0
16	0,12	0,12	0,12	0,16	0,11	0,10	0,13	0,11	0,11	0,18	0,58	0
17	0,13	0,14	0,13	0,13	0,30	0,13	0,10	0,13	0,11	0,11	0,15	0
18	0,14	0,13	0,14	0,12	0,15	0,11	0,13	0,11	0,11	0,12	0,11	0
19	0,16	0,11	0,15	0,14	0,11	0,13	0,10	0,12	0,15	0,14	0,12	0
20	0,15	0,18	0,14	0,14	0,13	0,13	0,12	0,15	0,15	0,20	0,16	0
21	0,18	0,17	0,15	0,15	0,23	0,18	0,20	0,22	0,21	0,20	0,25	0
22	0,33	0,35	0,29	0,28	0,31	0,26	0,27	0,42	0,41	0,34	0,32	0
23												
24												
25												
26											0,46	0
27	0,22	0,22	0,22	0,26	0,23	0,20	0,34	0,18	0,16	0,25	0,18	0
28	0,19	0,16	0,13	0,16	0,16	0,19	0,15	0,11	0,12	0,15	0,16	0
29	0,11	0,42	0,20	0,40	0,16	0,13	0,11	0,15	0,10	0,17	0,11	0
30	0,13	0,13	0,10	0,13	0,11	0,13	0,16	0,16	0,11	0,12	0,10	0
31	0,13	0,12	0,14	0,11	0,13	0,14	0,15	0,15	0,13	0,11	0,16	0

Note: Because of the satellite's orientation to the sun correction factor
March 30 at 1851 UT. Gaps in the listings correspond to intervals

MEASURED BY SATELLITE

9 – EXPLORER 37

MARCH 1974

(cm^2/sec)

	HOUR												
	12	13	14	15	16	17	18	19	20	21	22	23	24
	0.13	0.11	0.12	0.12	0.12	0.15	0.12	0.12	0.16	0.14	0.14	0.13	0.11
	0.12	0.12	0.13	0.14	0.13	0.11					0.11	0.12	0.13
	0.14	0.11	0.12	0.14	0.12	0.11	0.12	0.13	0.14	0.16	0.13	0.12	0.13
	0.10	0.11	0.10	0.13	0.14	0.20	0.33	0.16	0.16	0.12	0.11	0.12	0.11
	0.11	0.11	0.12	0.11	0.13	0.14	0.11	0.17	0.12	0.13	0.15	0.13	0.19
	0.13	0.13	0.11	0.15	0.57	0.12	0.19	0.17	0.14	0.12	0.14	0.12	0.14
	0.14	0.16	0.21	0.24	0.19	0.14	0.20	0.19	0.23	0.24	0.14	0.23	0.18
	0.18	0.19	0.20	0.22	0.29	0.33	0.25	0.31	0.37	0.35	0.21	0.47	0.26
	0.39	0.34	0.40	0.49	0.42	0.57	1.17	0.83	0.47	0.66	0.48		
	0.36	0.80	0.34	0.36	0.39	0.33	0.77	0.36	0.30	0.56	0.22	0.40	0.28
	0.25	0.22	0.15	0.42	0.27	0.22	0.21	0.17	0.17	0.30	0.43	0.28	0.17
	0.13	0.19	0.11	0.11	0.48	0.12	0.26	0.10	0.10	0.15	0.15	0.09	0.17
	0.09	0.17	0.17	0.15	0.25	0.12	0.20	0.19	0.09	0.24	0.10	0.20	0.13
	0.17	0.11	0.12	0.19	0.15	0.13	0.14	0.13	0.44	0.11	0.16	0.14	0.12
	0.16	0.20	0.23	0.17	0.13	0.28	0.18	0.34	0.17	0.29	0.41	0.17	0.20

ctors were applied to the measured flux on all days except March 28 to
als for which no data are available. No events were observed in March.

SOLAR X-RAYS MEA
SOLRAD 9

MA

NAVAL RESEARCH LABORATORY 8 - 20A HOURLY AVERAGES (10^{-2} ergs/cm^2

DAY	1	2	3	4	5	6	7	8	9	10	11	HO
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14	0,28	0,26	0,24	0,23	0,24	0,23	0,22	0,23	0,21	0,21	0,23	0,
15	0,20	0,22	0,25	0,26	0,24	0,23	0,23	0,22	0,22	0,22	0,22	0,
16	0,20	0,18	0,18	0,20	0,17	0,19	0,21	0,20	0,20	0,22	0,58	0,
17	0,18	0,20	0,21	0,21	0,35	0,20	0,19	0,20	0,19	0,19	0,20	0,
18	0,20	0,19	0,19	0,20	0,20	0,20	0,21	0,20	0,19	0,22	0,21	0,
19	0,25	0,20	0,19	0,17	0,19	0,19	0,18	0,17	0,18	0,17	0,17	0,
20	0,19	0,14	0,15	0,16	0,15	0,16	0,15	0,18	0,17	0,17	0,15	0,
21	0,13	0,14	0,13	0,13	0,13	0,15	0,15	0,17	0,17	0,18	0,17	0,
22	0,17	0,25	0,20	0,18	0,21	0,20	0,22	0,21	0,29	0,21	0,19	0,
23												
24												
25												
26											0,15	0,
27	0,11	0,10	0,09	0,10	0,09	0,08	0,08	0,08	0,09	0,08	0,07	0,
28	0,06	0,09	0,06	0,05	0,05	0,05	0,05	0,07	0,06	0,04	0,04	0,
29	0,06	0,29	0,21	0,32	0,13	0,11	0,08	0,07	0,06	0,05	0,06	0,
30	0,10	0,12	0,07	0,07	0,06	0,06	0,09	0,09	0,09	0,07	0,06	0,
31	0,06	0,06	0,06	0,06	0,06	0,06	0,07	0,06	0,06	0,05	0,06	0,

EASURED BY SATELLITE
– EXPLORER 37

MARCH 1974

cm^2/sec)

HOUR 12	13	14	15	16	17	18	19	20	21	22	23	24
0,21	0,21	0,21	0,22	0,21	0,20	0,20	0,20	0,21	0,21	0,19	0,20	0,21
0,23	0,23	0,23	0,24	0,22	0,21					0,22	0,19	0,22
0,27	0,25	0,23	0,21	0,22	0,21	0,20	0,20	0,20	0,20	0,21	0,19	0,19
0,20	0,20	0,20	0,21	0,26	0,32	0,41	0,33	0,27	0,23	0,20	0,21	0,22
0,20	0,20	0,21	0,20	0,20	0,19	0,19	0,20	0,19	0,18	0,19	0,22	0,21
0,16	0,15	0,17	0,18	0,52	0,18	0,16	0,17	0,15	0,16	0,15	0,17	0,15
0,15	0,14	0,17	0,28	0,14	0,14	0,17	0,13	0,15	0,12	0,14	0,22	0,14
0,16	0,17	0,18	0,19	0,21	0,21	0,19	0,22	0,20	0,22	0,22	0,18	0,15
0,18	0,19	0,16	0,22	0,26	0,17	0,12	0,16	0,16	0,20	0,21		

0,21	0,14	0,13	0,14	0,18	0,15	0,20	0,12	0,11	0,30	0,10	0,26	0,10
0,09	0,08	0,11	0,07	0,08	0,09	0,07	0,06	0,06	0,06	0,06	0,11	0,06
0,04	0,04	0,04	0,04	0,27	0,04	0,04	0,04	0,05	0,05	0,05	0,06	0,06
0,06	0,05	0,06	0,05	0,07	0,06	0,08	0,06	0,05	0,07	0,05	0,10	0,07
0,06	0,07	0,06	0,06	0,06	0,06	0,06	0,05	0,05	0,06	0,04	0,06	0,06
0,12	0,09	0,08	0,07	0,06	0,08	0,08	0,08	0,08	0,14	0,08	0,05	0,06

SOLAR X-RAYS M
SOLRAD

NAVAL RESEARCH LABORATORY 1 - 8A HOURLY AVERAGES (10^{-3} ergs/

DAY	1	2	3	4	5	6	7	8	9	10	1
1	0,18	0,19	0,17	0,22	0,24	0,41	0,24	0,26	0,27	0,36	0,2
2											
3											
4											
5											
6											
7											
8											
9											
10											
11	1,29	0,71	1,76	1,01	0,60	0,42	0,44	0,60	0,75	1,52	0,9
12	0,87	1,07	1,06	1,36	0,77			0,72	1,04	0,78	1,4
13	8,53	19,0	1,88	1,09	15,2	15,8	9,14	24,3	27,7	8,16	28,
14	1,48	0,86	1,58	1,88	1,67	2,11	3,88	1,57	1,27	1,99	2,7
15											
16											
17											
18											
19				0,78	0,86	1,17	1,09	8,10	10,8	3,53	0,8
20	0,37	0,35	0,58	0,29	0,28	0,42	0,27	1,36	0,77	0,46	0,5
21	0,36	0,21	0,40	0,28	0,32	0,25	0,25	0,27	0,35	0,25	0,2
22	0,23	0,48	0,24	0,15	0,18	0,17	0,62	0,23	0,50	0,18	0,1
23	0,14	0,16	0,19	0,18	0,16	0,17	0,21	0,17	0,23	0,29	0,2
24	0,20	0,30	0,43	0,37	0,22	0,67	0,43	0,32	0,62	0,93	

Note: Because of the satellite's orientation to the sun correction fa
0658 UT to April 13 at 0536 UT and April 21 at 0307 UT to April
no data are available. These are the last tabulations from the

S MEASURED BY SATELLITE
AD 9 – EXPLORER 37

APRIL 1974

rgs/cm^2/sec)

	HOUR												
11	12	13	14	15	16	17	18	19	20	21	22	23	24
,26	0,55	1,08	0,61	0,50	1,40	1,45							
,90	1,27	1,10	0,55	0,96	1,32	0,91	0,54	0,66	0,66	0,49	0,92	0,64	0,63
,49	0,85	0,81	0,95	0,96	1,21	1,56	0,94	0,64	0,68	0,83	0,93	0,89	1,07
28,2	8,58	2,02	9,79	1,07	24,2	7,68	5,71	8,51	2,42	1,70	2,23	3,14	1,30
2,77	4,58	1,26	1,52	3,47	3,20	1,80	2,82	1,73	2,28	1,34	3,16	1,67	1,70
,80	0,56	0,32	0,37	0,70	0,82	0,66	0,58	0,49	0,41	0,35	0,38	0,26	0,34
,53	0,37	0,28	1,22	1,47	0,40	0,25	0,19	0,27	0,15	0,19	0,20	0,38	0,23
,25	0,13	0,21	0,22	0,37	0,28	0,16	0,21	0,22	0,18	0,15	0,17	0,13	0,28
,17	0,25	0,15	0,22	0,26	0,18	0,21	0,28	0,14	0,14	0,18	0,14	0,16	0,15
,22	0,14	0,29	0,18	0,25	0,19	0,27	1,35	0,79	0,56	0,30	0,33	0,19	0,27

factors were applied to the measured flux on all days except April 12 at
ril 22 at 0145 UT. Gaps in the listings correspond to intervals for which
the memory system of SOLRAD 9 available for publication.

SOLAR X-RAYS M
SOLRAD 9

NAVAL RESEARCH LABORATORY 8 - 20A HOURLY AVERAGES (10^{-2} ergs/

DAY	1	2	3	4	5	6	7	8	9	10	11
1	0,06	0,06	0,06	0,07	0,07	0,29	0,14	0,13	0,10	0,09	0,09
2											
3											
4											
5											
6											
7											
8											
9											
10											
11	0,65	0,52	0,93	0,93	0,59	0,52	0,69	0,62	0,75	1,13	0,86
12	1,05	1,18	1,15	1,38	1,11			0,98	1,11	0,93	1,43
13	4,25	7,87	1,89	1,25	6,00	8,36	6,52	8,68	10,6	4,50	7,89
14	1,41	1,19	1,51	1,69	1,72	1,65	2,00	1,44	1,24	1,65	2,05
15											
16											
17											
18											
19				0,73	0,75	0,73	0,86	2,17	4,31	2,75	1,19
20	0,46	0,48	0,68	0,49	0,41	0,47	0,45	1,08	0,89	0,53	0,66
21	0,51	0,41	0,54	0,39	0,44	0,39	0,42	0,41	0,47	0,32	0,27
22	0,40	0,49	0,39	0,24	0,24	0,25	0,45	0,26	0,38	0,28	0,30
23	0,18	0,19	0,21	0,22	0,18	0,16	0,15	0,12	0,13	0,10	0,08
24	0,08	0,07	0,08	0,09	0,10	0,09	0,15	0,13	0,19	0,10	

60
Misc
Apr 74

MEASURED BY SATELLITE
9 – EXPLORER 37

APRIL 1974

gs/cm^2/sec)

HOUR													
11	12	13	14	15	16	17	18	19	20	21	22	23	24
09	0,20	0,60	0,36	0,15	0,38	0,51							
86	0,97	1,03	0,60	0,61	1,10	0,85	1,01	0,86	0,73	0,62	0,90	0,79	0,78
43	1,11	1,02	1,18	1,19	1,61	1,46	1,29	0,96	0,96	1,00	1,01	1,10	1,08
89	4,51	1,85	2,91	1,42	7,66	4,33	3,06	3,59	1,93	1,65	1,93	2,39	1,55
05	2,71	1,57	1,61	2,34	3,12	1,96	2,53	2,07	2,14	1,49	2,11	1,36	1,34
19	0,93	0,91	0,89	0,83	1,05	0,83	0,97	0,78	0,71	0,64	0,57	0,50	0,51
66	0,65	0,59	1,18	1,42	0,74	0,42	0,35	0,35	0,33	0,38	0,30	0,62	0,44
27	0,26	0,27	0,34	0,34	0,29	0,27	0,30	0,31	0,26	0,22	0,29	0,26	0,37
30	0,31	0,22	0,25	0,26	0,24	0,33	0,31	0,22	0,21	0,23	0,19	0,21	0,19
08	0,11	0,09	0,10	0,12	0,09	0,12	0,72	0,60	0,49	0,24	0,24	0,11	0,14

SOLAR X-RAYS BY SATELLITE
EXPLORER 37

APRIL 1974

NAVAL RESEARCH LABORATORY

OUTSTANDING EVENTS

DAY	START TIME	0.5-3A FLUX XE-5	PEAK TIME	1-8A FLUX XE-4	PEAK TIME	8-20A FLUX XE-3	PEAK TIME	END TIME	COMMENTS
13	0000	47,00	0006	130,00	0005	53,00	0008	0010D	
13	0054E	120,00	0117	310,00	0117	93,00	0118	0153D	
13	0410E	92,00	0422	270,00	0424	93,00	0433	0509D	
13	0547E	64,00D	0547E	350,00D	0547E	140,00D	0548E	0647D	
13	0730E	130,00	0753	1300,00D	0758E	270,00	0758	0825D	
13	0920	67,00	0941	180,00	0941	73,00	0945	1003D	
13	1046	130,00D	1052E	780,00	1051	150,00	1052	1124	
13	1314E	88,00	1318	380,00	1319	77,00	1319	1319D	
13	1540	130,00D	1544D	480,00	1544	110,00	1545	1608D	
13	1714	15,00	1714	50,00	1714	24,00	1715	1720	
13	1723	61,00	1748	150,00	1747	67,00	1749	1758D	
13	1806	120,00	1809	250,00	1809	84,00	1811	1813D	
13	1908	44,00	1909	110,00	1909	38,00	1909	1916	
13	2207	8,40	2207	49,00D	2215D	25,00	2214	2215D	
13	2233	7,20	2234	46,00	2237	29,00	2238	2249	
14	0638	60,00	0639	130,00	0640	35,00	0641	0654	
14	0758	6,30D	0803E	49,00	0759	25,00	0759	0803	
14	1001E	6,40	1001	66,00	1005	27,00	1004	1005D	
14	1113E	12,00	1124	82,00	1119	38,00D	1125E	1133D	
14	1450E	7,90	1450	45,00D	1450E	33,00	1511E	1515	
14	2117	6,80	2118	43,00	2121	25,00	2130	2132D	
14	2148	6,80D	2149D	67,00	2155	31,00D	2155E	2156D	
19	0733E	110,00	0735	130,00	0745	44,00D	0802E	0803D	
19	0843E	34,00D	0843E	120,00	0844	44,00D	0846E	0904D	

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UAG-26 "Data Compilation for the Magnetospherically Quiet Periods February 19-23 and November 29 - December 3, 1970", compiled by Helen E. Coffey and J. Virginia Lincoln, World Data Center A for Solar-Terrestrial Physics, May 1973, 129 pages, price 70 cents.

UAG-27 "High Speed Streams in the Solar Wind", by D. S. Intriligator, University of Southern California, Department of Physics, Los Angeles, California, 90007, June 1973, 16 pages, price 15 cents.

UAG-28 "Collected Data Reports on August 1972 Solar-Terrestrial Events", Parts 1, 2 and 3, edited by Helen E. Coffey, World Data Center A for Solar-Terrestrial Physics, July 1973, 932 pages, price (includes Parts 1-3) $4.50.

UAG-29 "Auroral Electrojet Magnetic Activity Indices AE (11) for 1968", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, October 1973, 148 pages, price 75 cents.

UAG-30 "Catalog of Data on Solar-Terrestrial Physics", prepared by Environmental Data Service, NOAA, Boulder, Colorado, October 1973, 317 pages, price $1.75.

UAG-31 "Auroral Electrojet Magnetic Activity Indices AE (11) for 1969", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, February 1974, 142 pages, price 75 cents.

UAG-32 "Synoptic Radio Maps of the Sun at 3.3 mm for the Years 1967-1969", by Earle B. Mayfield and Kennon P. White III, San Fernando Observatory, Space Physics Laboratory and Fred I. Shimabukuro, Electronics Research Laboratory, Laboratory Operations, The Aerospace Corporation, El Segundo, California, 90245, April 1974, 26 pages, price 35 cents.

UAG-33 "Auroral Electrojet Magnetic Activity Indices AE(10) for 1967", by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Environmental Data Service, May 1974, 142 pages, price 75 cents.

UAG-34 "Absorption Data for the IGY/IGC and IQSY", compiled and edited by A. H. Shapley, National Geophysical and Solar-Terrestrial Data Center, NOAA, Boulder, Colorado, U.S.A., W. R. Piggott, Science Research Council, Slough, U.K., and K. Rawer, Arbeitsgruppe für Physikalische Weltraumforschung, Freiburg, G.F.R., June 1974, 381 pages, price $2.00.

UAG-35 "Catalogue of Digital Geomagnetic Variation Data at World Data Center A for Solar-Terrestrial Physics", prepared by Environmental Data Service, NOAA, Boulder, Colorado, July 1974, 20 pages, price 20 cents.

UAG-36 "An Atlas of Extreme Ultraviolet Flashes of Solar Flares Observed Via Sudden Frequency Deviations During the ATM-SKYLAB Missions", by R. F. Donnelly and E. L. Berger, NOAA Space Environment Laboratory, Lt. J. D. Busman, NOAA Commissioned Corps, B. Henson, NASA Marshall Space Flight Center, T. B. Jones, University of Leicester, UK, G. M. Lerfald, NOAA Wave Propagation Laboratory, K. Najita, University of Hawaii, W. M. Retallack, NOAA Space Environment Laboratory, and W. J. Wagner, Sacramento Peak Observatory, October 1974, 95 pages, price 55 cents.

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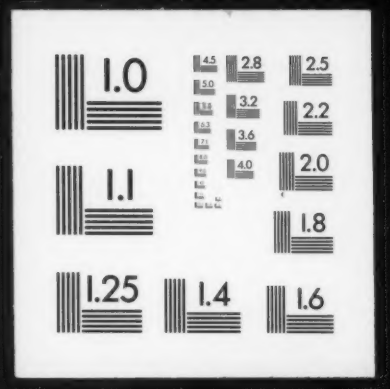
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